MADRAS Information

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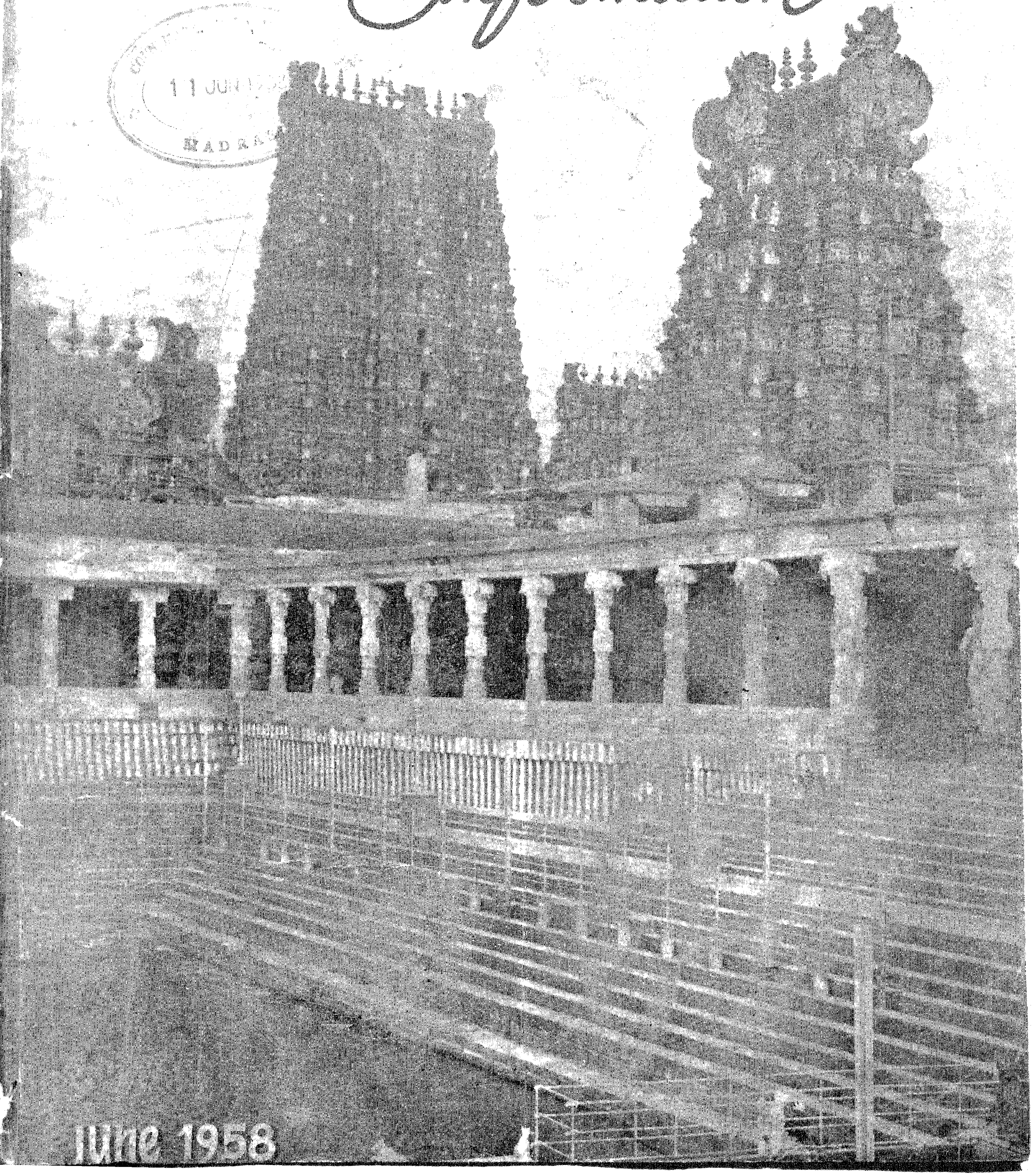

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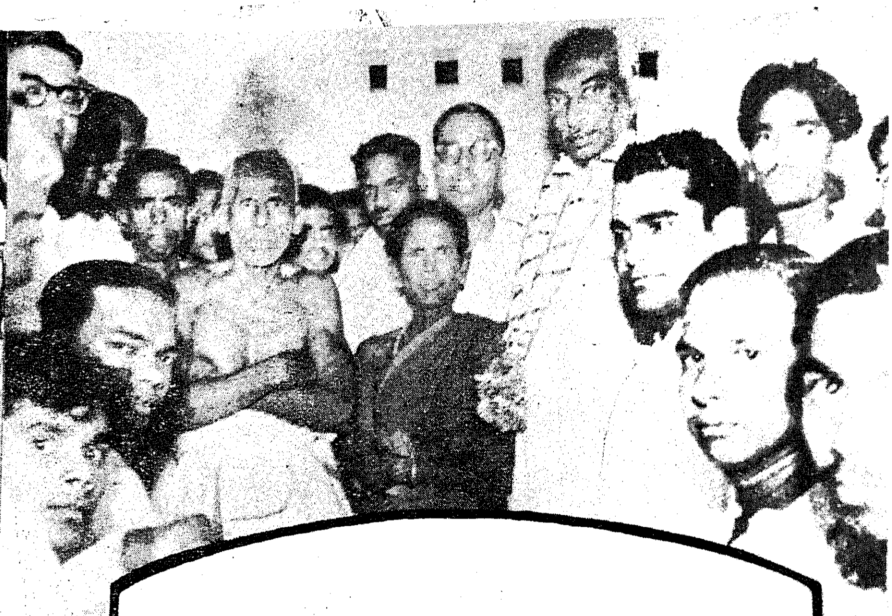

Chief Minister's Tour of South Arcot

During his tour of South Arcot District, the Chief Minister declared open Harijan Colonies in Killiyur and Tirunallur.

Above right : *The Chief Minister is seen with a happy couple at Killiyur who are going to their new house.*

Above left : *The Chief Minister at the Veerapandy Mat Weavers' Co-operative Society.*

Left and bottom : *These people are eagerly awaiting the arrival of the Chief Minister at Tirunallur for the opening of the newly built Harijan Colony.*

1963/58
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Cover page:
The Tank of the Golden Lotus in the Meenakshi-amman Temple at Madurai.

MADRAS INFORMATION

Vol. XII, No. 6 June 1958

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(2)

Facts and Figures of our FOOD SITUATION

By Sri P. P. I. VAIDYANATHAN, Bar.-at-Law, I.C.S.,

Secretary to Government, Food and Agriculture Department.

The last two years have witnessed a considerable amount of anxiety and nervousness about our food situation. The worries started at the time of the harvest in January 1956 when the prices of foodgrains rose, instead of going down. Everybody assumed that this was due to scarcity of supplies and the fears were confirmed by an unusual change in the pattern of movement of rice in the Southern States. The normal trade movement of rice was from Andhra to Kerala, but this diminished rapidly and the movement of rice from Tanjore to Kerala increased proportionately. No wonder that people in this State began to get restless.

An objective study of our food statistics might throw some light on the position. We have a fairly satisfactory set of statistics of production based on crop cutting experiments and we are told that they are accurate to about 1½ per cent. There is the difficulty that the State of Madras has been so repeatedly reorganised that the statistics are often confusing, but this difficulty can be overcome with some trouble and the statistics of production can be built up for the area covered by the present Madras State. A scientific analysis of these figures can indicate an answer to some of the questions which are often asked such as : What is our scale of production of food ? Is it increasing as fast as the Government claim ? What is the level of consumption of foodgrains ? Are we surplus or deficit in food ? Can we afford an export of foodgrains to our neighbour, Kerala which has a chronic deficit ? I shall attempt to find an answer for these questions by a careful study of the statistics of production and export.

The actual production of foodgrains during the last nine years is given at 'A' on page 4 for the areas covered by the present Madras State. The first fact which will be noticed in these figure is the great importance of the seasonal conditions for actual production. From 1949–50 to 1952–53, the State experienced uniformly adverse seasonal conditions ; but from 1953–54, up till now, we have had a piece of good luck in having generally good seasonal conditions. The figures indicate that there was a sudden jump in the production in 1953–54 and this was of the order of about 10 lakhs tons. So, we can conclude that if the seasonal conditions really take a turn for the worse, our production will go down by about 10 lakhs tons. So, if we are to be really self-sufficient in rice in an adverse year, our production in a really good year must be about 10 lakhs more than the prevailing consumption.

A second conclusion which can be drawn from the above statistics is that there has been a steady increase in the production of rice. This is obviously the result of our Grow More Food measures which are concentrated on irrigated paddy cultivation. Apart from these figures, the general experience of the farmers in different parts of the State also is that there has been a steady increase of production of about 15 per cent during the last five years and that this is due to the additional food production potential resulting from the Grow More Food activities.

Unfortunately, we cannot say the same thing about millet production which has been showing ups and downs throughout these years and has remained more or less stationary. This is what should be expected, because in millet production, very little has been done for increasing the production and as most of the millets are cultivated under dry conditions, they are not amenable to any of the well-known measures of increasing food production. Moreover, the better quality land on which millet is being grown now is now steadily encroached upon by rice, cotton and groundnuts. There is clearly an urgent need for laying some emphasis on some measures for improving the production of dry millets, such as by the extension of hybrid millets or improved seeds.

An important factor in our food position is the stadily growing increase of movement of rice to Kerala from Tanjore and South Arcot, while on the other hand, we have very little import of rice from Andhra into the Madras State. There is a good deal of movement by road for which figures are not available, but the exact figures for all rail movements are available. They show that during the last four years, there has been a net export of rice from Madras State of the following order :—

Year.		*Tons.*
1954–55	..	112,600
1955–56	..	228,888
1956–57	..	229,942
1957–58	..	231,602

In the beginning, these figures caused considerable alarm, because this State was all along a deficit State, but fortunately, because of the sequence of good years and the success of Grow More Food measures, we have been able to stand this export. On this crucial question whether we can stand this export, there is considerable controversy, because if the foodgrain requirements of an adult are calculated at 16 oz. per day we are barely self-sufficient in spite of favourable seasonal conditions. But it is very doubtful if the scale of consumption is as high as 16 ounces per day and the steady export of rice to Kerala is itself an indication that the 16 ounces base is pitched rather high.

The analysis at 'B' on page 4 of our actual consumption during the last three years may give some indication of how much an average adult could consume at the prevailing price level.

It may be interesting to compare the above with similar figures for two

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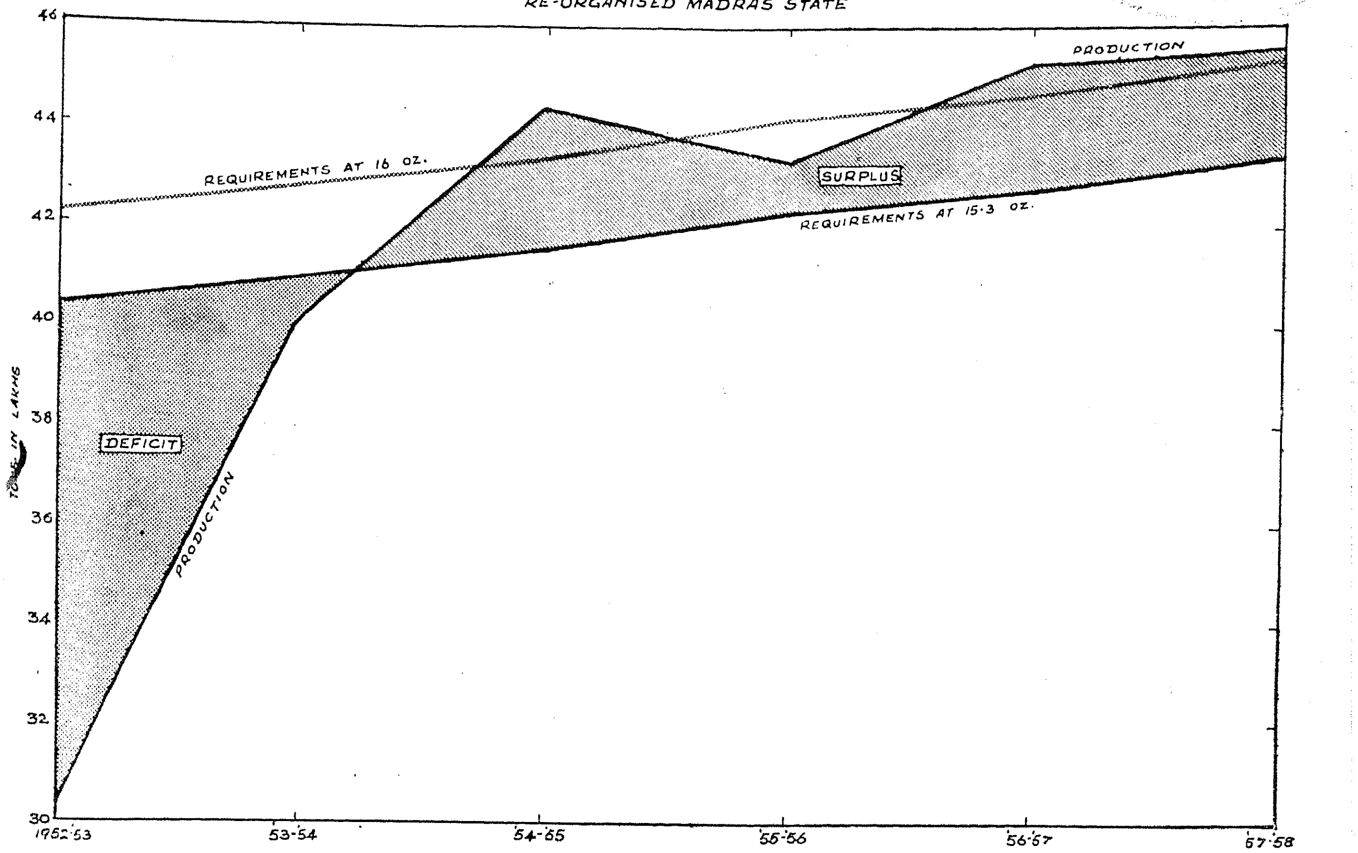
PRODUCTION OF FOODGRAINS [LESS SEED REQUIREMENTS] AND REQUIREMENTS AT 15·3 AND 16 OZ. PER ADULT PER DIE[M]
RE-ORGANISED MADRAS STATE



years during the rationing period when the crops also were quite unsatisfactory.

	1949–50	1950–51
1. Total production.	3,047,000	3,094,000
2. Seed requirements.	70,000	69,000
3. Net imports.	240,000	104,000
4. Net available for consumption.	3,217,000	3,129,000
5. Scale of consumption.	12·7 oz.	12·2 oz.

The following conclusions can therefore be drawn about the scale of consumption in the State. Under the prevailing prices and also on the basis of the prevailing purchasing power in the hands of the people, consumption will range between 15·0 and 16 oz. and will most probably remain at about 15·3 oz. per adult person per day. On this scale of consumption the total foodgrains requirements of this State, will be about 43 lakhs tons and if the harvest is good this would leave a surplus of about 2·30 lakhs tons for export. If the seasonal conditions take a turn for the worse, and become as bad as that prevailing during 1948–51, the production may drop by about 9 lakhs tons and the State will find itself deficit to the extent of about 7 lakhs tons in such a bad year. So the aim of our food production should be to make the State self-sufficient in an adverse year and this can be achieved if food production goes up by about 7 lakhs tons over the present level. Of course, we should not forget that even to maintain the present level of consumption, the production has to increase steadily at the rate of 1·38 per cent per year in order to provide for the increase in population.

The above statistics can be looke[d] at from a fresh angle in the light o[f] this level of consumption of 15·3 ounce[s] and we may calculate the extent t[o] which this State was surplus or defic[it] during the last six years, after makin[g] allowance for the seed requirement[s]. The results are given at ' C ' on page [4].

The calculated surplus and the expor[t] for the year 1954–55 and 1955–56 diff[er] very much from each other, but for th[e] two years taken together the two se[ts] of figures tally. For the remainin[g] 2 years—1956–57 and 1957–58, ther[e] is a close agreement between the calcu[]lated surplus and the net actual export[s] by rail which indicates that this line o[f] reasoning might probably be very nea[r] the mark. The figures are more graph[i]cally represented in the chart abov[e]. The requirements, if the level of cere[al] consumption is to be raised to 1[6] ounces, is also indicated in it.

A

Year.	*Rice.* *Area (Acres).*	*Rice.* *Production Tons.*	*Millets and other foodgrains.* *Area Acres.*	*Millets and other foodgrains.* *Production Tons.*	*Total foodgrains.* *Rice and millets.*
1949–50	4,769,000	1,791,460	4,854,000	1,255,540	3,047,000
1950–51	4,299,000	1,950,000	4,675,000	1,144,330	3,094,330
1951–52	4,420,000	2,095,000	5,333,000	1,368,970	3,463,970
1952–53	4,309,000	1,989,000	5,730,000	1,112,560	3,101,560
1953–54	5,143,000	2,539,000	6,608,000	1,568,280	4,107,280
1954–55	5,335,000	2,753,000	5,908,000	1,777,240	4,530,240
1955–56	5,456,000	2,955,000	5,528,000	1,466,980	4,421,980
1956–57	5,538,000	3,103,000	5,597,000	1,519,740	4,622,740
1957–58	5,605,000	3,134,000	5,575,000	1,524,720	4,658,720

NOTE.—The statistics from 1950–51 for rice are according to Crop Cutting Experiments. The figures from 1952–53 for Cholam, Cumbu and Ragi included under " Millets " are also according to Crop Cutting Experiments. All the other figures are according to the traditional method.

B

—	1954–55.	1955–56.	1956–57.	1957–58.
1. Production of foodgrains (tons)	4,530,240	4,421,980	4,622,740	4,658,720
2. Seed requirements (tons)	88,000	88,000	88,000	88,000
3. Net export (tons)	112,000	229,000	230,000	232,000
4. Net available for consumption (tons) ..	4,330,240	4,104,980	4,304,740	4,338,720
5. Estimated population	31,735,000	32,198,000	32,670,000	33,153,000
6. Scale of consumption (Oz)	16·0	14·9	15·4	15·3
7. Average price of rice per maund	14·06	13·88	16·68	18·50

NOTE.—(i) A population of 100 belonging to different age groups normally consumes 84 adult units.

(ii) The seed rate is calculated on an average scale of 44 lb of paddy or 9 lb. of millets per acre.

C

—	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.	1957–58.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Production of foodgrains (Less seed requirements).	3,021,790	4,013,000	4,436,240	4,327,920	4,527,320	4,562,710
equirements at 15·3 oz. per adult per diem.	4,036,140	4,094,420	4,153,630	4,225,790	4,276,100	4,339,370
Surplus (+) or deficit (—).	(—) 1,014,350	(—) 81,420	(+) 282,620	(+) 102,130	(+) 251,220	(+) 223,340
Actual net export by rail ..	(Not available)		112,000	229,000	230,000	232,000

The Lure of Small Savings.

By Sri M. Shanmugam, M.A., B.L., Special Officer for Small Savings and Ex-Officio Deputy Secretary to Government, Finance Department.

The philosophy of saving is appealing because it is co-extensive with freedom from want, through financial independence. Phrases like 'Save for the rainy day' and 'Save for the future, forcibly bring out the reserve character of the age-old concept of saving. The Small Savings Movement holds out yet another equally good reason for saving, viz., saving for a sunnier day. Saving is the voluntry tightening of the belt presently in order to achieve necessary elasticity for meeting the inevitable demands of an extended waist line in the future.

The corner-stone of the Small Savings Movement is thrift or thriftiness. The concept of thrift is larger than the concept of saving, for while saving is a conscious action, thrift is an attitude, a way of life. Thrift is the prudent husbanding of all manner of resources. Therefore, thrift moulds character by building up the several attributes thereof like self-reliance, forbearance, will-power, foresight, perseverance and by imposing self-discipline. Thriftiness is the negation of improvident living. Savings presupposes adherence to thrift as a responsible way of life. The movement seeks to promote the habit of thrift among people. The formation of this habit must result in people facing life with good cheer and a feeling of security.

The Small Savings Scheme focuses public interest on national projects and provides the humblest of the citizens in the land a chance of personal participation in national development. The ordinary citizen instead of being a mere bystander is vouchsafed the role of a stake-holder in the business of Government. By drawing attention to the development requirements of a given area, it awakens people to a positive solution without merely falling back upon seeking official assistance. The movement which has its springs in the people therefore engenders self-help, self-reliance in the people and national stature is heightened appropriately. The small Savings Movement, apart from being a potent instrument of capital finance, is in essence a sociological process in that it registers the reversal of the old attitude towards Government, conditioned, formerly, by the historical reason of political subservience. The movement is the translation, in terms of economics, of the socialistic pattern of society. After all, we are today the last generation of slaves and the first generation of free men. In a free democratic society. it is the citizen's privilege and responsibility to share in the burden of governance, otherwise adult franchise can have no real meaning. Out of the total internal interest-bearing obligation of the country of about 3,600 crores, about 640 crores is owed to small savers. Thus small savers own as much as 18 per cent of the internal public debt. It is the blue print o the future to continuously enlarge this proportion so as to secure a purposeful trend towards egalitarianism and the socialistic pattern of society.

The Small Savings Movement helps to fight inflationary tendencies. The huge development Plan expenditure has passed excess purchasing power into the hands of a large body of people hitherto unaccustomed to save, and it is the aim of the movement to canalise this supernumerary income away from consumption into investment for productive purposes. The movement gathers in small savings and renders them fruitful. This will arrest the steep upward movement of prices and check the creeping inflation. The movement thus aims at educating the people towards securing a reasonable balance between production, and consumption. In this sense, therefore, saving is postponed consumption

Cheque system was introduced in the savings banks of the Major Post Offices in the recently. The Governor inaugurated it in the Madras General Post Office.

Intensive propaganda on Small Savings was carried on in the State. Photo shows Sri M. Shanmugam, Special Officer for Small Savings, addressing a gathering at Palayamkottai under the presidentship of Sri W. R. S. Satthianadhan, I.C.S., Chief Secretary to Government.

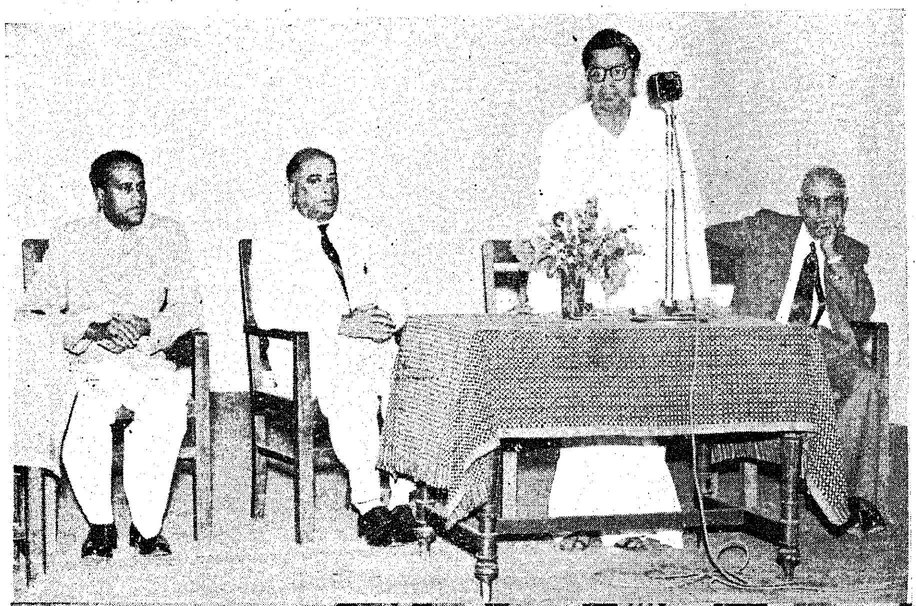
The skimming off of surplus money and its collection as savings serves to stabilize the purchasing power of the currency.

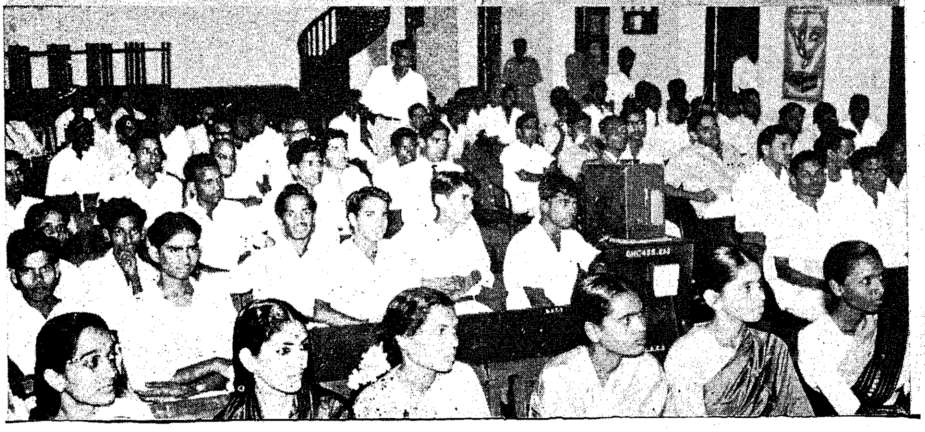
Savings make for power in international politics. Savings can convert an under-developed economy into a balanced economy. Small Savings serve to doctor the symptoms of economic ill-helath of the country

Through Small Savings it is open to every citizen of the country to save for the benefit of himself, his family and of the State. In relation to the country's young, this serve to rear a class of responsible and public-minded citizens. Thus, thrift, patriotism and enlightened citizenship constitute the under-pinning of the Small Savings Movement.

Regarded purely from the investment angle, the scheme has much to commend itself. An attractive rate of interest on capital outlay, and the total absence of market fluctuations guarantee a pre-selected, safe and sound investment for the small saver. The Post Office affords the humblest citizen a chance to open a savings account with a minimum initial investment of rupee two only. Savings stamps have been introduced to assist the harassed saver who may be manfully accumulating the capital necessary for investment at minimum level in the scheme. Small Savings, therefore,

(*Continued on page* 21)





A seminar of select College students of the City on Small Savings was inaugurated by the Finance Minister.

Know Your District

Madurai

The Madurai district lies between 9° 30′ and 10° 50′ northern latitude and 77° 10′ and 78° 30′ eastern longitude. It is bounded on the north by the districts of Coimbatore and Tiruchirappalli, on the east by Ramanathapuram and Tiruchirappalli districts, on the south by Ramanathapuram district and on the West by the Coimbatore district and the Kerala State. The district has an area of 4,869 square miles :—

The division of the district into Revenue divisions and taluks is as shown below:—

Name of Division.		*Taluks comprising the Division.*
(1)		(2)
Madurai	..	Madurai. Melur
Usilampatti	..	Tirumangalam. Periyakulam.
Dindigul	..	Dindigul. Palani Nilakottai Kodaikanal.

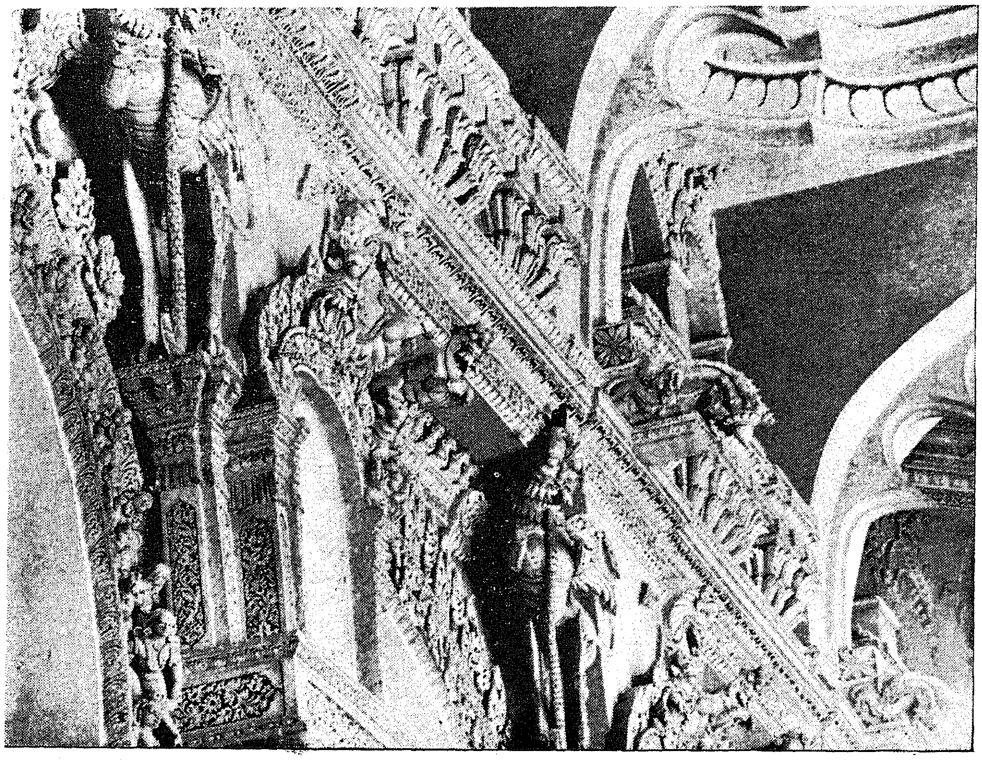
General Features :

The district consists of a section of the plain stretching from the eastern slopes of the Western Ghats to the sea. This plain is broken in the west by several spurs from the Ghats and a few isolated hills and masses of rock scattered over the country.

Hills and Mountains :

The most important of these spurs is the Palni or Varaga mountains, which project in a north-easterly direction across the district for a distance of 50 miles. Their high speaks reach an elevation of more than 8,000 feet and they enclose a plateau of over 100 square miles with an average height of 7,000 feet. They may be divided, for the sake of convenience, into the Higher and Lower Palnis. On the former lying to the west, the tops of the hills are grassed and have an abundant supply of water at all times of the year. The latter are much lower; the plateau to the east suddenly falls to some 4,000 feet and then gradually slopes towards the plains until the hills melt into them at a height of about 1,000 feet. The second spur of importance is the Varashanad or Andipatti range, which also runs north-east from the Western Ghats for a distance of some 40 miles and shuts in the upper portion of the Vaiga valley on the south, parallel to the Palnis on the north. It then turns suddenly to the south-east and after

A corridor in the famous Tirumalai Naicken Mahal in Madurai.



Such intricate designs of masonry work are found in the Tirumalai Naicken Mahal.

rumningin this direction for 15 miles sinks into the plain not far west of Madurai. Its height is inconsiderable. The hills are wild and uncultivated, rocky and clothed with the scantiest vegetation. A few miles north-east of the Palni range, begins an irregular congeries of hills known as the Sirumalais, the Karanthamalais, the Natham and the Alagar hills, which fill up a considerable portion of the Madurai, Melur and Dindigul taluks towards the boundary of Tiruchirappalli. These hills are low, sterile and uninhabitable on account of the malignant fever which lurks on their slopes and the only mass which is at all considerable and lofty is the Sirumalais which have an extreme length of 20 miles and reach to 3,500 or 4,500 feet in height.

Rivers :

The principal river of the district is the Vaigai, which rises in the Western Ghats and after flowing north-east between the Palnis and the Andipatti range turns south-east and flows past Madurai to the sea in the Palk passage. The Varashalai drains in the same direction from the Natham hills to the sea, north of the Vaigai and the Gundu, from the Andipatti range, to the south, These three rivers are extremely uncertain in their flow and are rarely in freshes for more than a few days at a time. Many channels are taken from them to feed irrigation tanks and the water they supply is fully utilized. The drainage of the greater part of the Dindigul and of the Palni taluks, however, passes northwards by various small streams to the Amaravathi and the Cauvery.

The general aspect of the plain is bare of trees, except along the lines of road. Groves of coconuts are to be found on the banks of the rivers. In the north-west towards Coimbatore, a good deal of the country is more or less enclosed. Valuable timber is to be found on the slopes of the Palnis and in the Cumbum valley which lies to the south and immediately under the Western Ghats.

The predominant geological formation of the district is granite, which is found beneath the surface in the whole area. A gravelly bed of laterite which is quarried for building purposes, runs through the eastern parts of the district from north to south.

Climate and Rainfall :

The district as a whole is generally dry except the upper Palnis and the southern portion of the Periakulam taluk known as the Cumbum valley. The Upper Palnis have a climate of their own with low temperature all round the year and fairly heavy rainfall during both the south-west and the north-east monsoons. The Cumbum valley situated in the southern portion of Periyakulam taluk is cooler than the plains of the district and has a very pleasant climate during the south-west monsoon. The hottest part of the year in the plains occurs during the months of April to June. The district gets a major portion of its rainfall during the north-east monsoon. The average rainfall of the district is 37 inches, of which 29 inches are from the north-east monsoon. Kodaikanal alone has recorded an average rainfall of 66 inches of which nealry 25 inches are recorded during the north-east monsoon period and the rest evenly distributed during the other months with the exception of January and February which have recorded a low rainfall of one to two inches per month. Most of the rainfall is more or less severe local showers and its effect is often lost only too quickly in the porous red soil which covers most of the district. Taking the district as a whole, the climate is not considered as healthy.

Soils :

The soil of the district is generally red loam or sand but black cotton soil is found in the river valleys and south of the Tirumangalam taluk as a continuation of the fertile tract of black cotton soil which covers most of the Sathur taluk in Ramanathapuram district and the north-eastern taluks of Tirunelveli district. In the Peryiakualm and Plani taluks, there are small patches of similar black soil.

The tops of the Kodai hills are covered with black soil often several feet thick, with dark yellowish clay substratum.

The total settled extent under black soil in the district is 203,048 acres and that under red soil is 2,142,163 acres. The black cotton soil is generally considered to be the be and the red sand, inferior.

Irrigation Facilities :

There are no perennial rivers of any importance in the district. Excepting the Periyar system, the best irrigation sources are the Vaigai and its tributaries, the Suruli and the Varahanadhi. These can only be regarded as equal to the second best irrigation sources in the Tirunel veli and Coimbatore districts. The

central part of the district is drained by the Vaigai and its tributaries. The Vaigai rising in the Varashanad valley runs at the foot of the Andipatti and the Nagamalai hills through the Madurai town to the eastern boundary of the district. The principal tributaries of the Vaigai are the Suruli which drains the Cumbum valley, the Teniar which drains the Bodinayakanur valley, the Varahanadhi and the Manjalar. In the north of the Vaigai valley, the plain of Dindigul and Palni taluks is drained by the rivers of Kodavanar, Nanganji, Nallatangi and Shanmughanadhi. These all rise in the Palni hills and run due north till they join the Amaravathi. On the east, the northern part of the Melur taluk is drained by two small rivers called the Palar and Tirumanimuthar which within the district are small uncertain streams but attain greater importance in their lower reaches. In the south-east, the Tirumangalam taluk is drained by the Gundar and its tributary, the Kamandalanadhi, which unite outside the district, but within the district, they are most uncertain, and often fail the tanks which look to them for supply.

The Periyar System takes its source at the head of the Cumbum valley. A few miles across the border between the Madurai district and the Travancore at the head of the Cumbum valley, the Periyar river runs in the Travancore territory through the Western Ghats towards Cochin. This river, most of the water of which formerly ran to waste, has been dammed at an elevation of about 3,000 feet and the bulk of its water is thereby collected in an artificial lake on the land taken on lease from the Government of Travancore for 999 years. By means of a cutting and a tunnel through the water-shed of the hills, this water is diverted from the lake eastwards into the Madurai district, where it flows down the Cumbum valley through the Suruli river into the Vaigai. Down the Vaigai, the Periyar water is carried as far as the Peranai dam where it is drawn from the river into the main canal of the Periyar system proper. This canal runs upwards for 35 miles through the taluks of Nilakottai, Madurai and Melur supplying an extensive system of tanks and channels. The area estimated at present as irrigable by the Periyar system is 143,000 acres. The area actually irrigated in fasli 1364 was 150,767 acres single crop and 40,844 acres double crop.

This is one of the districts where well irrigation is in great favour. Well irrigation is most important in Dindigul, Palni and Tirumangalam taluks. Under this system of irrigation, three crops are grown in a year and many of the crops grown, e.g., tobacco, cotton, paddy and sugarcane yield a handsome return.

Crops :

Paddy is the main food crop occupying about 3·44 lakhs of acres. Millets also are grown on fairly large extents. Pulses are cultivated as a mixed crop with groundnut. Wheat and garlic are the chief crops grown in the Upper Palnis. Coffee, cardamom and plantains are the chief products of the Lower Palnis. The plantains grown on the Palni range of hills and the Sirumalais are of a peculiar species. The fruit is of very good quality and is exported in large quantities even to cities outside the State.

Among the industrial crops in the district, the foremost is cotton. Groundnut and sugarcane are next in importance.

In the Upper Palnis, the cultivation of potatoes and English vegetables like cauli-flower, cabbage, etc., has expanded in recent years. The cultivation of grape-vine which was till recently confined to a few villag round about Pattiveeranpatti in Ni kottai taluk is now spreading to Peri kulam and Dindigul taluks. Son improved varieties that have bee introduced are found to be ver profitable to the growers as well a popular with the consumers.

Roads :

Madurai City forms the centr of a network of inter-district road connecting Coimbatore, Tiruchirappalli Ramanathapuram and Tirunelvel as well as the Kerala State. The National Highway to Cape Comorin passes right through the length of the district. The district is on the whole well provided with a network of roads, the total length of which is 2,464 miles. Village communications, however, are not good enough especially in Periyakulam, Dindigul and Palni taluks.

The district is well served by buses and goods traffic by road also is very considerable.

Railways :

The Southern Railway traverses the district from north to south for nearly a hundred miles. A branch line from Dindigul connects Coimbatore through Palni taluk. There is another branch line from Madurai going west to Bodinaickanur at the foot of the Western Ghats. It passes

The Lake in Kodaikanal.

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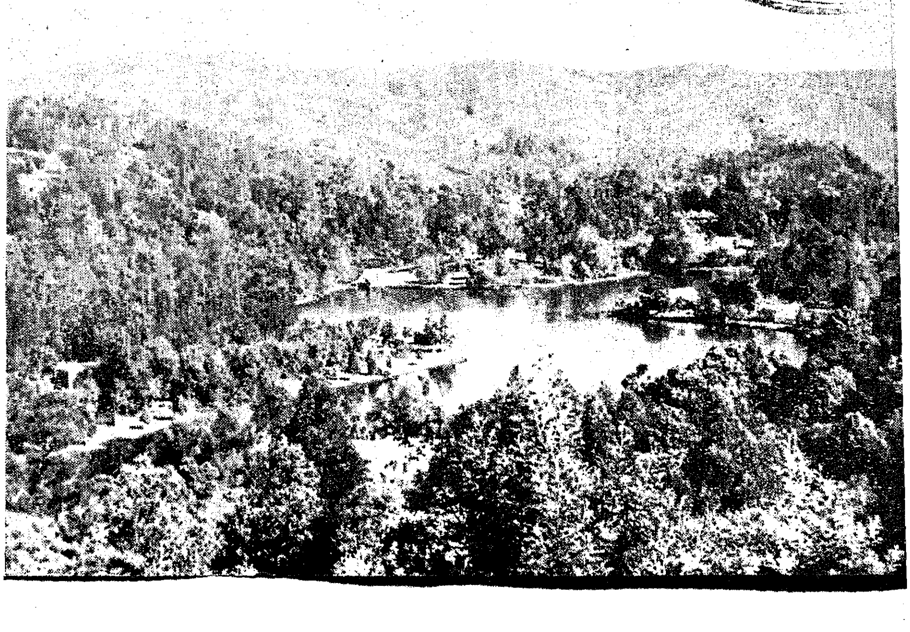

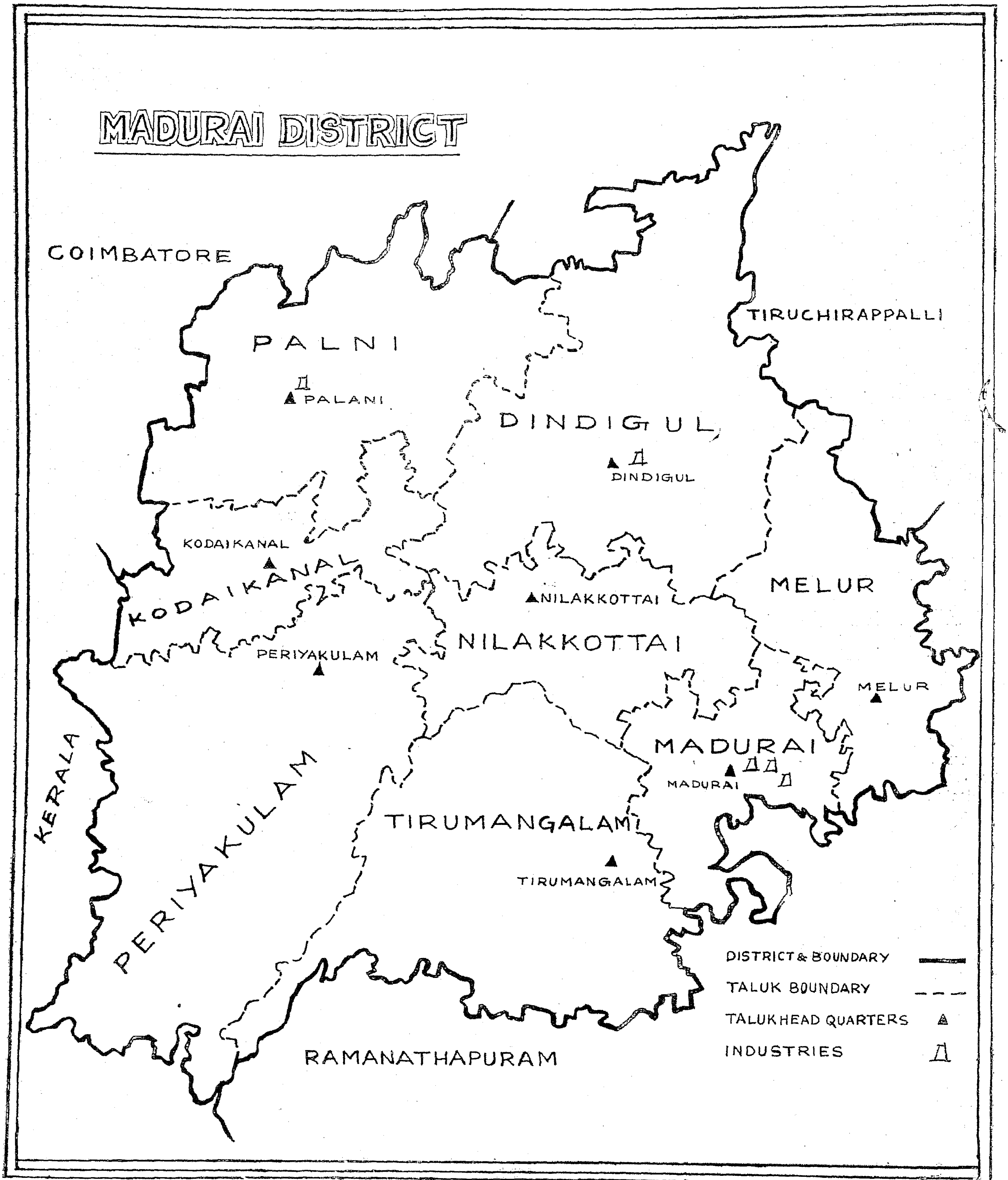
MADURAI DISTRICT
COIMBATORE
TIRUCHIRAPPALLI
KERALA
RAMANATHAPURAM
PALNI
PALANI
DINDIGUL
DINDIGUL
KODAIKANAL
KODAIKANAL
PERIYAKULAM
NILAKKOTTAI
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MELUR
MELUR
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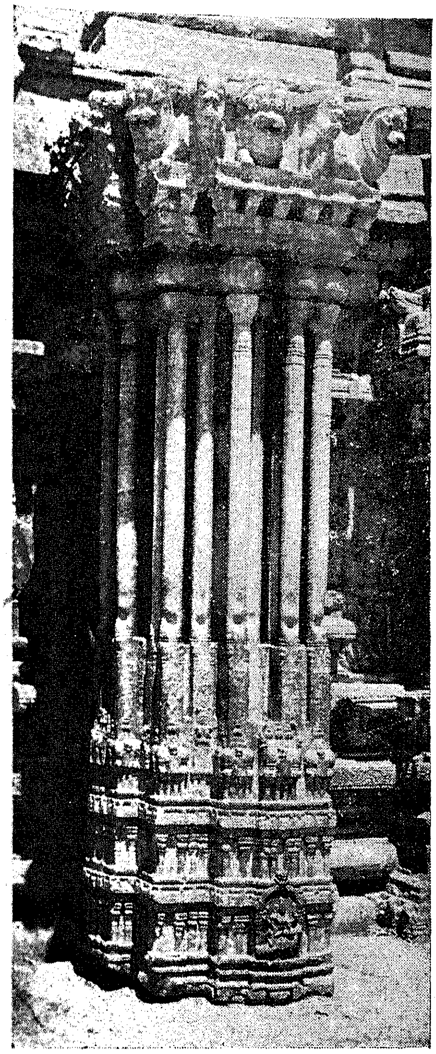
PERIYAKULAM
TIRUMANGALAM
TIRUMANGALAM
DISTRICT & BOUNDARY
TALUK BOUNDARY
TALUK HEAD QUARTERS
INDUSTRIES



The pillar of "sapta swara" in the Meenakshi Amman Temple.

through Usilampatti and Theni which are important marketing centres for agricultural produce in the region. The total length of railway in the district is 136½ miles—all metre gauge.

Population.—The population to the district in 1951 was 28 91 lakhs. The density of the population for the district as a whole works out to 600 per square mile. The area covered by the forest in the district is 1,308 square miles, out of a total area of 4,869 square miles. The density of population taking the inhabitable area alone into account works out to 770 per square mile. The population of the district increased by 16·9 per cent in the decade 1941–51. It is estimated that during the first half of the current decade, the population of the district would have further increased to about 30 lakhs. Among the factors which have contributed to the increase in population, compared to the decade ending 1940, are the increase in the number of textile mills and the influx of agricultural workers from the neighbouring drought affected areas of Ramanathapuram and Tirunelveli districts to the Periyar irrigated area of this district.

Vital Statistics.—According to the 1951 census the average birth rate was 32·2 per mile and the death rate 21·1 per mille. The maternal mortality was 5·7 per 1,000 live births.

The average birth and death rates are practically the same as those of the State while the maternal mortality is less than the State average which is 8·1 per 1,000 live births.

The district has a number of major industrial units particularly in the textile field. Among the smaller industries leather tanning, match manufacture, cotton ginning and pressing are important from the point of view of the employment they provide. The district as whole can be said to have become more industrialized than any other district of the State with the exception perhaps of Coimbatore district. The number of units under different industries and the total number of people employed are given below :—

	Name of industry.	*Number of institutions.*	*Number of people employed.*
1	Spinning and weaving Mills.	48	20,254
2	Automobile Workshops.	23	5,000
3	Cigar Factories ..	20	1,100
4	Match Factories ..	9	1,343
5	Cotton Ginning and Pressing.	20	1,352
6	Rice Mills	106	1,678
7	Tanneries	20	687
8	Iron Safe Manufacturing.	8	200

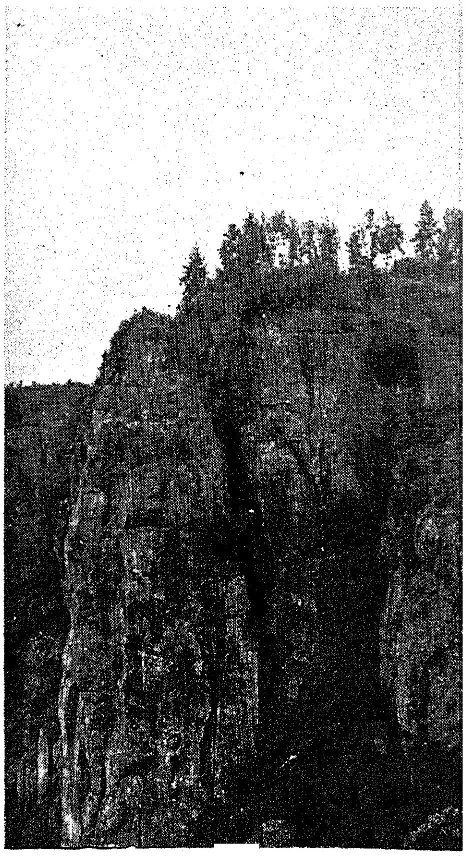
When the Periyar Hydro-Electric Project is completed, the district will have abundant power for developing more industries.

Social and economic conditions of the people :

The district comprises of 126 towns with a population of 5,000 and above, of which six are municipalities and 25 are major panchayats. Madurai, the second populous city in the State, plays an important role as an industrial centre. It has got several spinning and weaving mills and many more are just springing up on the outskirts of the city. It has a thriving handloom industry from days of old and it is renowned for its "Junnadi Sarees". This industry has spread throughout the district and several co-operative handloom centres have also been established in all parts of the district.

Even in agricultural economy, it is not a district of mere paddy plants or forest plantations. It is multi-cropped and every pocket has an individuality of its own. The Palni hills, the Varshanad valley and the slopes near the Periyar can boast of rich plantations and this district is one of the heaviest

The Pillar Rocks.



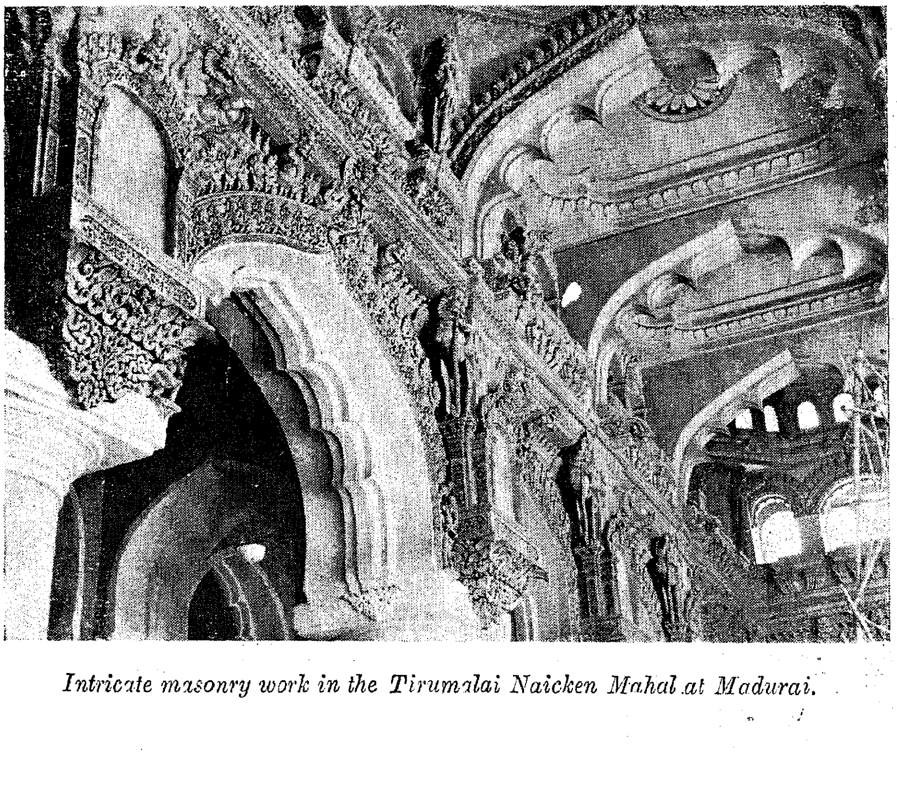
The Kodaikanal Observatory.

The social and economic structure of the district is thus varied. Agriculture continues to be the mainstay of the people in the district especially those in the taluks of Tirumangalam, Palni and Dindigul and they have no subsidiary occupation to help them. The Plan aims at starting new industries in various rural centres with a view to raise the standard of living of the common man. The manufacture of hurricane lights in Palni and the scheme for the manufacture of locks in Dindigul are some of the new industries worth mentioning. The match industry in Tirumangalam taluk has taken root firmly and is of great help to people in this area.

Importance of the district :

Madurai is one of the ancient historic cities in South India. It was the capital of the Pandiyan Kings and later of the Nayaks. It has been for the last 2,000 years the centre of Dravidian culture and civilization. As a seat of the Tamil Academy (Tamil Sangam) it attracted all the scholars of the South. The great Meenakshi temple in heart of the town in a living monument of Dravidian architecture. The famous Tirumalai Nayak Palace, the Pudumantapam and the Thousand Pillar Hall bear eloquent testimony to the skill of the ancient architects and

producers of cardamom, tea and to an extent of coffee. The Palni hills is a fruitful source for blue gum and wattle. The Sirumalai hills and also the slopes of the Lower Palni hills are a plentiful source of supply of plantations which is in demand throughout the State. The enterprising cultivators in Pattiveeranpatti and Ganguvarpatti have also started the cultivation of grapevine yards and this cultivation also is rapidly increasing. Cumbum valley and the ayacut under Periyar in Nilakottai and Melur taluks have an extensive ayacut in paddy and the yield of paddy in Cumbum valley is very high probably the highest in the State. The well-irrigated areas in Nilakottai, Dindigul and Periyakulam taluks grow sugarcane in plenty and they feed the sugar mills in Pandiyarajapuram near Vadipatti. Karunganni cotton comes up very well in the black cotton soil of Tirumangalam taluk and is the mainstay of the people in this locality.



Intricate masonry work in the Tirumalai Naicken Mahal at Madurai.

the interest and patronage afforded to them by the rulers of the past. Queen Mangammal, one of the later Nayak Rulers, is still remembered by the well-paved roads in the city and the avenues in the various parts of the district. Madurai continues to grow in importance and it is at present the second biggest town in the Madras State. It can boast of 5 colleges including 2 for girls, 16 high schools of which 4 are for girls and 100 elementary schools. Besides these, there are 3 training schools for secondary grade teachers, one Polytechnic Institute and a Medical College which has come up recently.

The construction of a Railway line from Dindigul Junction via Theni to Gudalur at the end of the Cumbum Valley and another line form Dindigul to Karaikudi have been under consideration. The District Planning Board has recommended that the first-mentioned scheme is essential and deserves high priority.

A view of the Sacred Heart College, Shenbaganur, on the Kodai Hills, where Jesuits are trained for priesthood.

Development of Suruli Waterfalls as Tourist Centre:

There are a few waterfalls in the mountains of the Cumbum valley of which the Suruli Falls can compare with the Courtallam Falls in Tirunelveli district but it is undeveloped. The Suruli Falls is also considered as "Punya Thirtham" and is resorte to by thousands of pilgrims on certai festive days. The falls can be develope as a summer resort. The neighbourin Panchayats of Cumbum, Uthama palayam and Narayanathevanpatt are proposing to improve the falls as a joint venture by improving th approach roads, constructing railing for the safety of the bathers, dressing rooms, etc., and also running a seasona hotel. The panchayats proposed to apply for a loan as also for a grant from the Government after detailed estimates are prepared. On a rough estimate, the scheme is expected to cost Rs. 2 lakhs and is provisionally included in the Plan as a loan scheme of panchayats.

Brass vessels making—one of the cottage industries of Madurai district.

Kodaikanal Municipality:

Kodaikanal is a hill-station and summer resort. The municipality has to maintain its roads, parks, etc., in a good style in order to attract visitors; but its revenue is not sufficient for the purpose. It has a protected water-supply but the distribution system has to be overhauled. Improvements to water-supply and roads are the important schemes in the municipality's Second Five-Year Plan.

More Facts ABOUT MILK

By Sri V. R. SADASIVAM, I.D.D., Diary Officer.

Milk is the only food which comes naturally from the living body. It has always been recognised as a valuable food for health.

We will now try to learn that this milk is, where it comes from, what it is made up of and methods adopted to make it safe for human consumption and also some of the defects in milk and how to avoid them.

Milk is the fluid secreted by the mammary gland of the female mammalina which is mainly intended for the sustenance of the new born. The udder of the cow is a glandular organ that secretes milk. This is divided into four quarters which has a tabular exit the teat through which milk is extracted. The milk cistern is an oblong cavity situated just above the teat and serves as a reservoir for milk. There are a number of cells lining the milk cavities called alvelois which supply milk to the cistern and these cells are the milk secreting cells. The secretion of milk is a continuous process in these alvelois. How exactly the milk is formed from the blood is not exactly known. When all these branches and milk cistern get filled up with milk, a pressure is developed inside the udder and further secretion of milk does not take place. When the calf sucks the teats and buts the udder it gives necessary stimulus and the harmone, " Oxytocien " released into the blood stream. The letting down of the milk commences within a minute of the release of this harmone and gets destroyed in the course of 6 to 7 minutes. If this is not released, the cow is not capable of letting down the milk.

Milk is a white opaque liquid. The specific gravity of milk ranges from 1·028 to 1·032. But there are extrimities ranging from 1·018 and 1·037. Milk freezes at about 0.54.C. and this is a constant for fresh milk. When water is added the freezing point is raised. Milk is about 1·6 times viscous as milk and boils about 212.5.F. Fresh milk is lightly acidic with a PH of about 0·65 and the acidity may range from 0·12 to 0·16 represented as Lactic Acid.

The constituents of milk are fats, carbohydrates, proteins ash or minerals and vitamins besides water. The Dairy men divides these materials into two groups (viz.) fat and solids not fat (generally termed S.N.F.) or total solids and water. This solids not fat contents in milk is a constant one for cows milk and buffaloes milk and the average S.N.F. contents of cows milk is about 8.5 per cent and that of buffaloes milk is 9·5 per cent. This constant is arrived at by finding out the Lactometer reading and percentage of fat in milk.

The high nutritive value of milk must be due to its constituents. As has been told before milk contains proteins, fat carbohydrates, minerals, salts and vitamins in almost the quantity required for proper nutrition. Hence milk is thus the nearest approach to a complete food and no other single food is known that can be used as a substitute. Milk is therefore called a " Balanced diet ".

Proteins are the body builders and the main constituent of body tissues and milk contains about 3·5 per cent of total proteins. Lactose is found only in milk. Its value is only as a source of energy. The milk fat known as butter fat or ghee constitutes four to five per cent in cow's milk and to 8 per cent on buffaloes milk. Besides supplying energy it is the carrier of fat soluble vitamins in milk. Much of the nutrition of milk is due to the presence of minerals. It has a special value to children as a source of Calcium and Phosphorus which are very important for the development of bones. The vitamins in sufficient amount to make it a valuable source are Vitamin A, Riboflavin and nicotanic acid. The other vitamins, viz., B, C, D, and E are also present.

Bacteria is abound in large numbers every where in atmosphere cattle sheds, milk utensils and equipments. Even fresh milk contains a good number of bacteria and to a large extent from the teats of the cows. Certain organisms are carried by unhealthy animals into milk which are communicable to human beings. Main among many are tuberculosis caused by mycobacterium tuberculosis ; undulant fever by Burcella abortus ; Septic sore throat by Staphylociacie. In addition milk contains various types of bacteria some of them are harmful for human beings and some not. The following are the main chemical changes milk undergoes as a result of bacterial activity :—

1. Lactose is converted into Lactic Acid and curdles the milk.
2. The milk fats are hydrolysed and free fatty acids and glyceroes are produced which produces rancidity in butter and ghee.
3. The case-in is liquified by Protecolytic organisms.

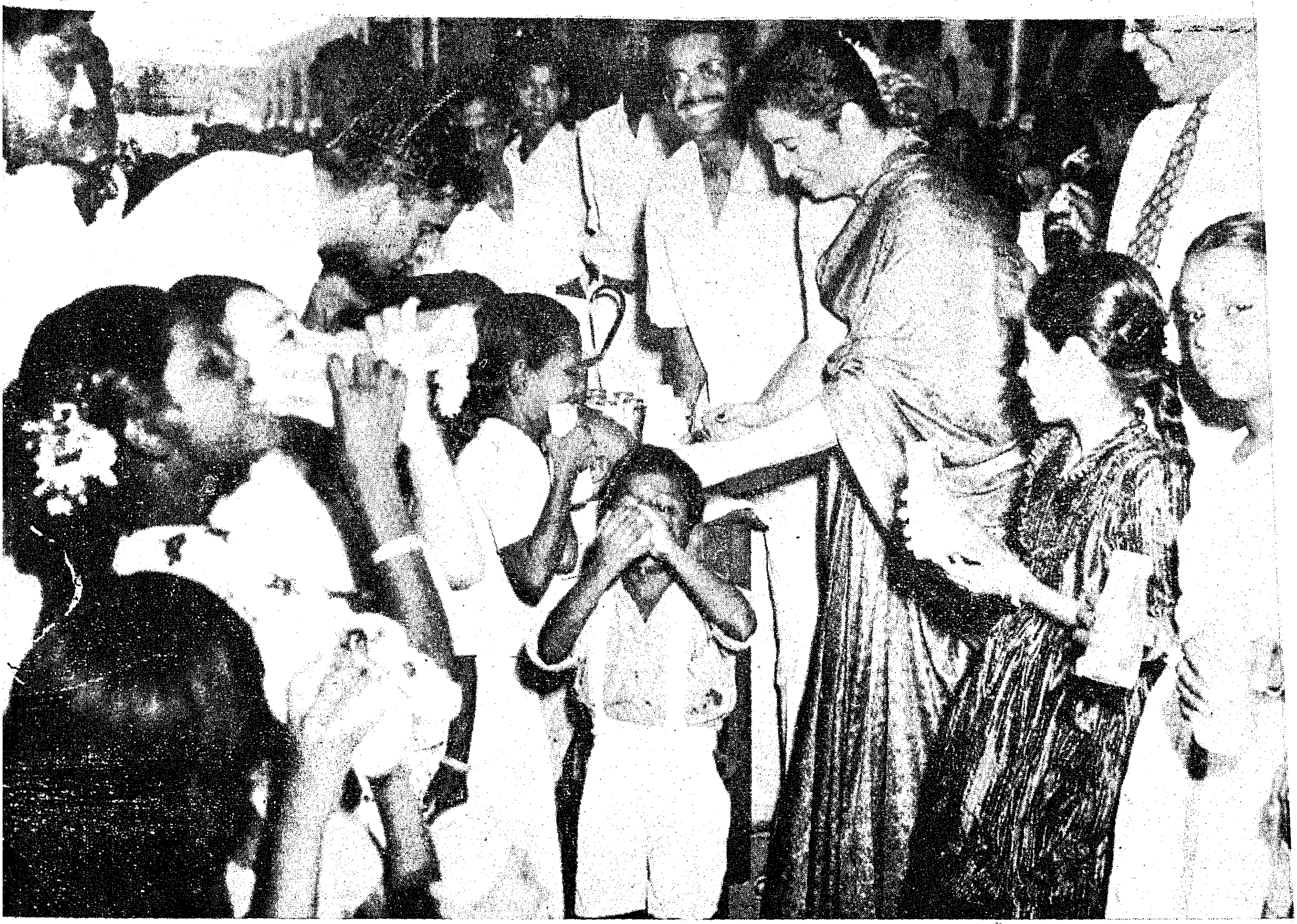
The various bacteria found in milk may be classified as follows :—

(1) Those that cause no apparant change in milk ;

(2) those that change the flavour without changing colour ;

(3) and others that cause marked changes in both appearance and colour.

It has been observed that the boiling temperature, quite extensive changes in some of the constituent parts of milk take place. The milk sugar gets caramalised, casein is hardened the calcium, magnesium and phosphorus salts are partly recipitated, all of which render the milk less digestible. Prolonged

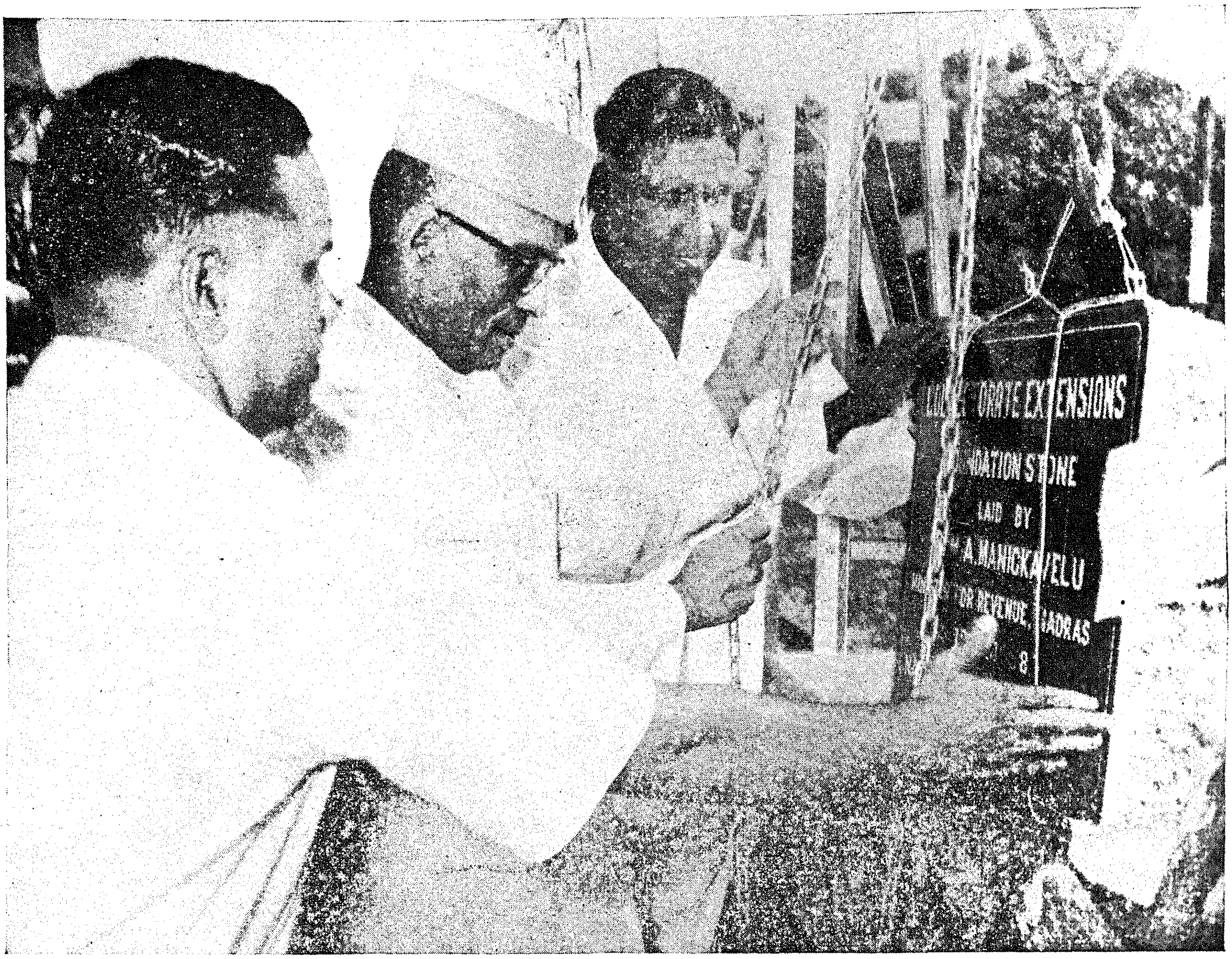


Drink More Milk! The Mayor of Madras, Mrs. Tara Cherian with a happy group of children on More Milk Day.

heating at high temperature causes the destruction of vitamins C, A and B. Since the constituents of milk are of highest biological value, the loss that occurs through boiling is a great loss indeed. Hence a method had to be evolved to render milk safe for consumption but at the same time not loss any of its nutritive value. In 1860, Louis Pasteur suggested that beer and wine when heated to comparatively low temperature and kept at that temperature for a comparatively long time overcame the difficulty of spoilage of these commodities through yeasts and mould. Thirty years later this was applied to milk. The two among many methods of pasteurisation of milk are (1) the High Temperature Short Time Pasteurisation where milk is heated to 162·5° F. held at that temperature for not less than 16 seconds and cooled down immediately to 40° F. and (2) whichever be the method, it is important that the milk after being heated should be rapidly cooled to a low temperature partly to avoid changes caused by heat and partly to prevent multiplication of the bacteria that are left behind. By this pastuerisation (1) Milk is rendered safe as all the pathogenic organisms are killed, (2) majority of non-pathogens are destroyed, (3) usual life of milk is prolonged. It has been said that one glass of milk passes through the human stomach in one hour whereas the same amount of bread takes 2½ hours and or almost 3½ hours. Goats milk has 1½ times the fats contents of cow's milk and ass's milk also contains more fat. But the most fat is found in whale's milk which contains as much as 5 times the fat contents of cow's milk. This will not mix with water. Medical experts say that it is better to drink quickly than to sip it slowly. The former method encourages speedy digestion whereas sipping milk forms a large curd in the stomach.

It has been said that dried milk was in existence as early as the period of Marco Polo who has written that the Mangolian Races of the fourteenth Century used to carry with them a 10 lb. brick of dried milk powder on long journeys. Each morning a small lump was broken off and put into a leather bottle with water and well mixed by the method of hanging the bottle on saddles of the mules. After a few miles march, by about mid-day the milk was ready to drink.

Milk is referred to be 'clean' in flavour (i.e.) that it is natural and not affected by anything foreign. Most of these are caused by the various types of bacteria which find place either in milking vessels orequipments, etc., milk is further very susceptible to absorption of foreign odour and offer a vey good media for growth and development, of bacteria. We will discuss a few common defects and methods of remedy.



Sri M. A. Manickavelu, Minister for Revenue, laid the foundation stone for the Kanyakumari District Collectorate extensions at Nagercoil.

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1. *Unclean Flavour.*—Caused by milk coming in contact with dirty equipments. The flavour is sharp and unclean. The remedy will be to ensure clean conditions and effective sterilisation. A number of unclean flavours have causes other than this. Tin wares coated with white slime given an unclean flavour exactly like the smell of the metal. The remedy for this will be to clean the equipment and sterilise it with boiling water.

2. *Fermentation.*—This is due to milk coming in contact with sour or perished rubbers or sour milk deposits in equipments. This is occasionally caused by milk absorbing the smelling and bacteria from fermented milk that is held too close to the fresh milk. The remedy will be to see that all perished and sour rubbers and sour and perished milk are removed far away from places where milk is kept.

3. *Rancid Flavour.*—In daily supply milk coming in contact with rancid milk deposits or coming in contact with such deposits. To rectify this clean thoroughly and sterlise all parts of vessels used for milking.

4. *High Acidity.*—This is caused by unclean equipment and cow yard dust and smells. This is also avoided by ensuring a high degree of cleaning.

5. *Feed Flavours.*—These are caused by cows grazing on lush and succelant pastures of fresh growth of grass. Practically all grasses give flavour till they become hard with mix less succelent when exposed to sunshine and drier conditions. These flavours can be controlled by efficiently wilting and aerating in a clean atmosphere. The permanent feed flavours are caused by cow consuming feeds with strong taste or smell such as turnips, garlic, onion, etc. Feeding these some hours well in advance of milking will obviate such flavours in milk.

Mechanisation of Fishing Industry

By Sri D. A. S. GNANADOSS, Assistant Director of Fisheries (Craft and Tackles).

The Fishing Industry is one of the oldest industries in the State, but has come into prominence only in recent years consequent on the general shortage of food. The seas offer abundant quantity of rich fish food which, if properly exploited would augment our food resources and help in bringing about increased nutritional standards. The Madras State has a long coast line of about 620 miles and fishing is carried on from 242 fishing villages located along the entire coast. There are only a few harbours and sheltered bays and the fishermen have generally to operate from the open and surf beaten coast only. To suit this peculiar condition crafts like the catamaran and the Masula boats has been evolved by the fishermen. These crafts are small and are not power propelled. As such their range and fishing capacity is limited.

In all the advanced countries of the world fishing is a completely mechanised process and the fishermen are as prosperous if not more as people in any other industry. Experts in the fishing industry are unanimous in their opinion that if the industry is to improve here, the fishing crafts should be fully merchanised and suitable types of improved and modern fishing gear should be used.

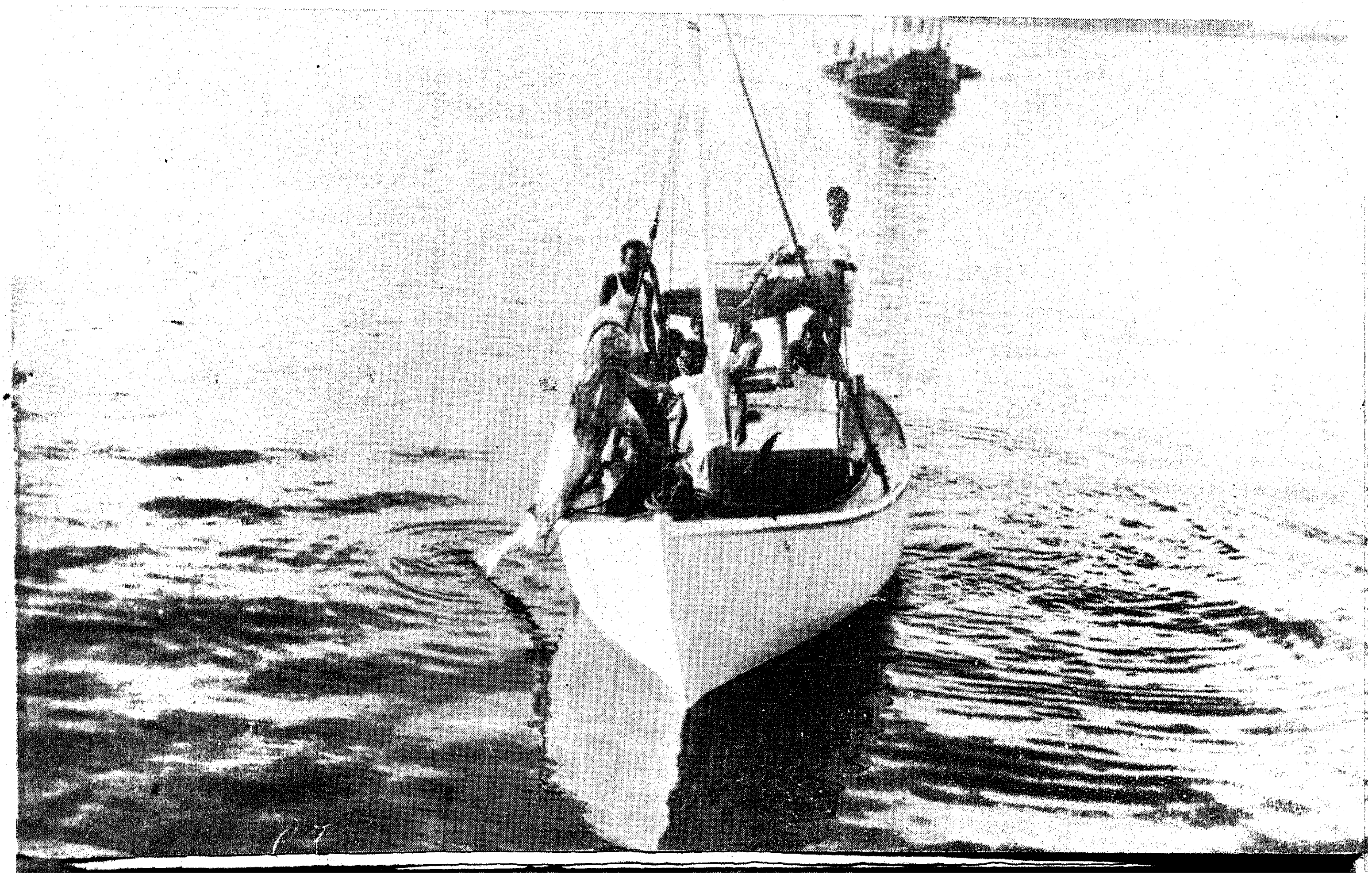
Indigenous crafts.

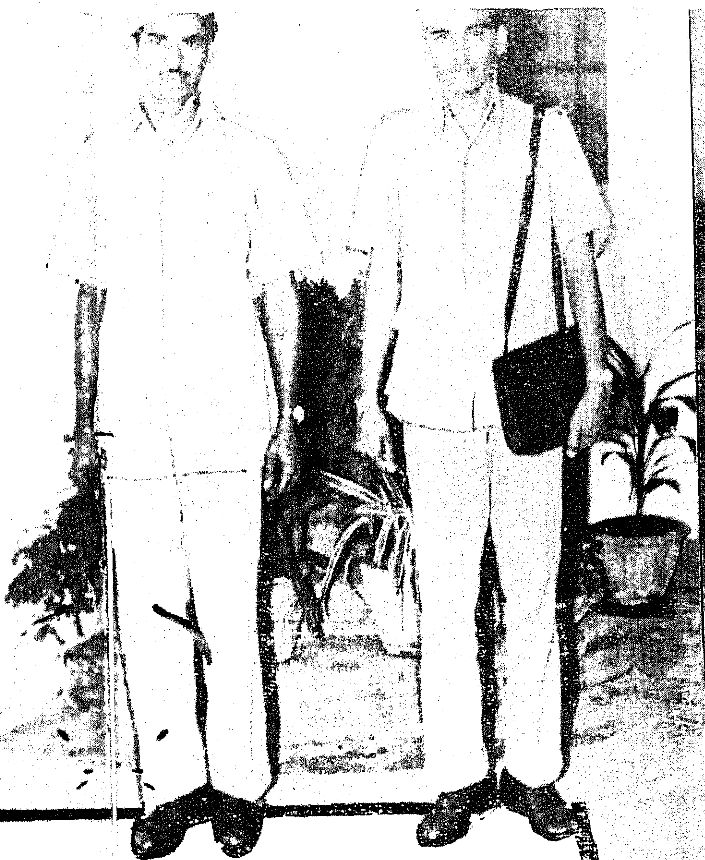
In any scheme of mechanisation first thought is given to the existing crafts. A survey of the indigenous fishing crafts in Madras State indicated that the Tuticorin type of fishing boat called "Vallam" is suitable for mechanisation and experiments are in progress to evolve the most efficient motorisation arrangement for this boat. However the vallam is popular in the Tuticorin coast only and has its own limitations as fishing craft. Hence there was need to evolve a suitable mechanised fishing craft which will be efficient and economical and will be readily acceptable to fishermen.

The Food and Agriculture Organization of the United Nations sent two Danish Fishing Boats to Madras

(*Continued on page* 20)

A Fishing Trawler.





MADRAS STATE TRANSPORT

New and spacious buses are now being put on the roads of Madras to cope with the increasing number of the travelling public.

The photographs on these pages show some interesting features of the State Transport.

Left-middle : *A view of the* **Transport House** *where the administrative offices are situated.*

Left-bottom : *A half-decker.*

Left-top : *The Bus Stop near the High Court.*

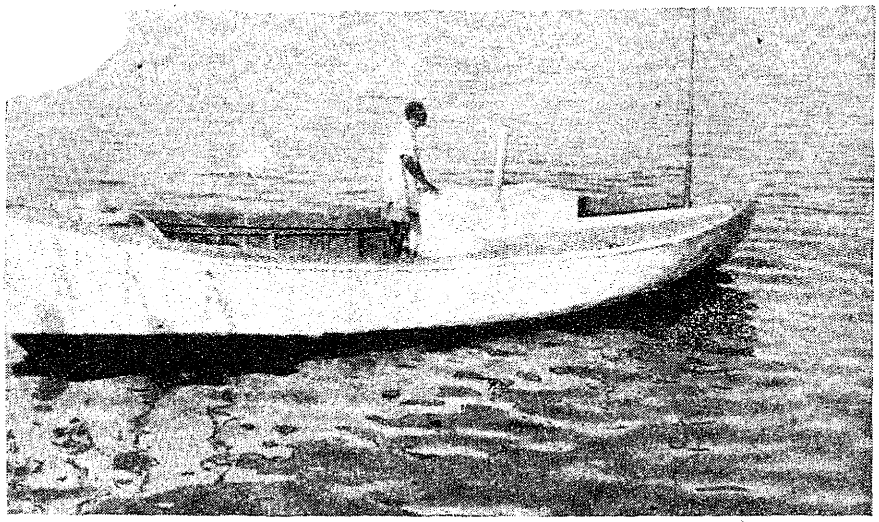
Right-top : *The Tourist Coach and below it, interior view of the Coach.*

Right : *One of the latest Leyland type of buses.*

Right-bottom : *The shed adjoining the Transport House.*

Top-middle : *A Driver* (left) *and a Conductor* (right).

Bottom-middle : *The Bus Stop near Central Station.*



The Pablo.

(*continued from page* 17)

in 1954 for demonstration fishing with the help of an icelandic Master fishermen—Mr. Illugason. The operations of the boat proved so very successful that there was a spontaneous demand from the fishermen for similar boats. Encouraged by this, the Department requested Mr. Paul Zener, a Naval Architect of the Food and Agricultural Organization then working in Madras to design a suitable boat incorporating all the good features of the Danish Boat.

The Pablo

on demonstration fishing. A revised version of the original Pablo will shortly be introduced which will provide more work space in the boat and incorporate several improvements in design and construction.

Trawlers.

As the next stage in the introduction of mechanised fishing boats, it is proposed to construct small shrimp trawlers based on a design made by Food and Agricultural Organisation for exploiting the rich shrimp grounds off Pamban and Madras. Thus it can b said th... olving

If this experiment proves a success, it will solve one of the greatest problems facing the coastal fishing-industry in the State.

A boat building yard for Madras.

Construction of mechanised fishing boat is a highly skilled and technical job and calls for workmanship of a very high order. The boat building industry in Madras State is mainly undertaking construction of heavy lighters and cargo schooners and has not evinced much interest in mechanised fish boat construction. The fishing industry is also not in a position to undertake construction of mechanised fishing boats. As such it has become necessary for the Government to construct the boats and supply them to the fishermen. The Department will very shortly have a fully equipped modern Boat Building Yard at Rayapuram, Madras, where the mechanised fishing boats will be constructed.

Nylon Nets.

To get the maximum advantage out of mechanised fishing it is necessary to introduce improved fishing nets and better fishing methods. Extensive experiments were made with local fishing gear and with imported nylon twine and with the help of the Fishing Experts of the Food and Agricultural Organization the Department has evolved and standardised suitable types and sizes of Nylon and other nets ...e used from the mechanised boats. ...very mechanised boat, sufficient ...f nets are supplied. The ...e also provided with new ...r they have used a set of ...l life period.

...tres.

...ised boats,
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Hence a subsidy of 50 per cent on the cost of the engine, and 25 per cent on the cost of hull is allowed for the boat and a subsidy of 33-1/3 per cent is allowed for the nets. The fishermen are also given a further concession to pay off the cost of the boats and nets in fixed easy instalments.

The introduction of mechanised fishing boats and improved fishing gear has already made an impact on the fishing Industry of the State. This is only the beginning of a great nation-building enterprise which has unlimited potentialities. The march is on and the goal is mechanisation and modernization of the fishing industry to the extent possible. The Government Fisheries Department will strive its utmost to usher in this happy development for the fishermen of this State in a reasonable time.

By Courtesy A.I.R., Madras.

State Transport.

The fleet strength of the State Transport as on 31st March 1958 was 450. Six new Leyland Comet vehicles of medium size were put on the road during the month. Six old perkins fitted Chevorlet vehicles were withdrawn from service during the month for condemnation.

No operational changes have been introduced for the month of March 1958.

General.

On 12th March 1958 a meeting of the City Transport Advisory Committee was held at Transport House with Secretary to Government, Home Department in Chair. The Committee discussed general problems relating to Traffic in the city.

On 28th March 1958 the Honorary Director went on tour to the Kanyakumari branch of this Department and conducted the first annual sports meet function held at Nagercoil on 29th March 1958.

Kanyakumari.

The fleet strength at the end of March 1958 was 75. An average number of 50 buses a day was operated.

Rs 2,56,778·96 were collected and 242,682·9 effective miles were covered and 879,?85 passengers were carried.

Special buses carried 16,?84 passengers for 4,437 3 miles and brought in a collection of Rs. 7,391·65.

(*Continued from page* 6)

remains the bulwark of one's declining years. The Gift Coupon which has been hailed as 'the present with a future" may in the hands of the small saver well revolutionize social habits, as for instance by replacing the usual presents at marriage and other ceremonial and auspicious occasions.

The Small Savings Movement spotlights the small coin in the realm and in the growing reverance for it demonstrably proves that "mighty okas from acorns grow". In our living democracy it is small wonder then that the several facets of small Savings provide endless charm.

The indigenous craft.

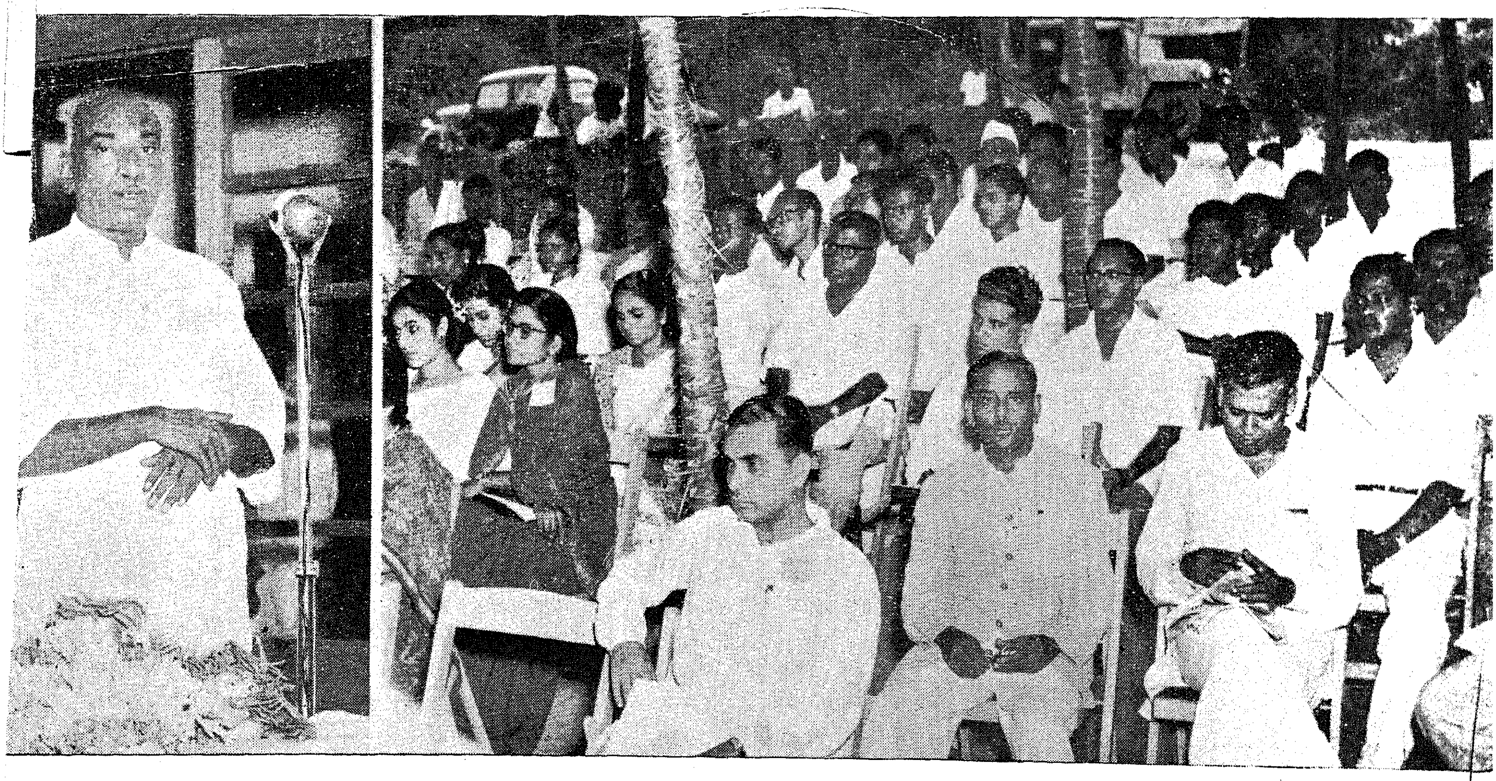
Seminar of Social Education Organisers

The need for publicising the achievements of the Government in various spheres among the villagers and enlisting their co-operation and support for the developmental activities was stressed by Sri K. Kamaraj, Chief Minister, inaugurating a three-day Seminar of the Social Education Organisers of the State at Mahabalipuram on Monday afternoon (21st April 1958).

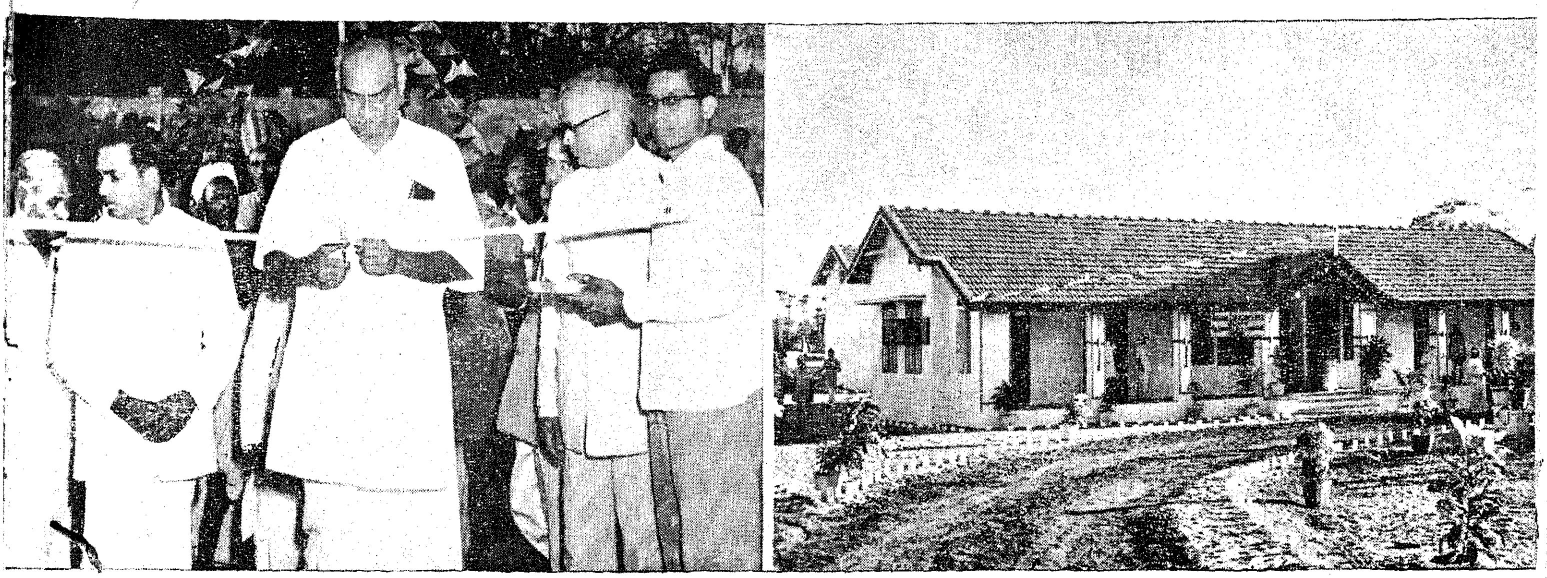
The Seminar was held in a specially erected pandal near the sea-shore and was attended by selected Social Education Organisers of the State with more than two years service selected Block Development Officers, Grama Sevaks and Grama Sevikas, and officers of the Harijan Welfare Department Information and Publicity Department and Rual Development Department. Nearly 80 delegates attended the conference.

The Chief Minister at the outset said that although Social Education Organisers have been doing work in the villages, they had to consider in what way their services could be utilised in the Harijan Welfare work also. There was a general feeling among the people other than Harijans that much was being done by the Government for the improvement of Harijans only, but on the other hand, the Harijans had a grievance that the Government had not done enough to improve their lot. They all knew that Harijans were generally poor and backward and first consideration should be given to raise their standard of living. The welfare of the country depended on raising the standard of life of the poorer sections of the society. Only on this basis, the Government had drawn their plans. In implementing these plans, they had to get over many difficulties and solve a number of problems. Even after implementing these schemes, they were not able to satisfy everyone in a village because the needs of the village were many and finance was always a limiting factor.

The Chief Minister said that they could enlist the support and sympathy of the villagers only by implementing the schemes expeditiously and meeting the needs of the villagers without undue delay. He said that dissemination of news and proper publicity work on items such as the financial condition of the country, the national income and budgetary provisions under different heads, the developmental activities to meet the requirements of the people and the Plan programmes, would go a long way in educating the people and in making them realise what was being done and what the Government proposed to do. In many respects, he said the villagers were either ignorant or ill-informed of Government's activities. Although the newspapers were helpful in spreading information about the development programmes of the Government, they had their own limitations. So, it was the duty of the Social Education Organisers to do real publicity work among the people. In order to



The Seminar of Social Education Organisers was declared open by the Chief Minister.



The Chief Minister declared open the Uthiramerur Block Office on April 11.

undertake this task, they must first of all equip themselves with up-to-date information and be confident of answering the questions of the villagers, who were really intelligent and shrewd enough to understand any intricate problem. The Social Education Organisers could also keep in touch with the District Harijan Welfare Officers so that they could understand the many-sided works undertaken by that Department.

Stressing the needed to arrest the fissiparous tendencies, the Chief Minister said that the there could be no two opinions that the integrity and unity of the country should be preserved if they were to utilise all the natural resources of the country and forge ahead. Any amount of finance would not bring about the desired changes and improvement, unless there was a change of heart among the villagers The Social Education Organisers were therefore required to undertake this special task in a spirit of service and humility. There should be mutual faith and oneness of spirjt between them and the villagers. There was a large number of Social Education Organisers working throughout the State. A good feeling towards the Government could be created among the people by their devoted service and publicity work.

The Chief Minister also stressed the need for proper co-ordination of the rural welfare work undertaken by the different departments of the Government.

Earlier Mr. G. Venkatachalapathi, Joint Development Commissioner, in his welcome speech said that this was the second seminar of Social Education Organisers, the first having been held at Gandhigram two years ago, at that seminar, a programme of work was chalked and carried out during the past two years. Now in the light of their experience, a new programme should be drawn up for implementation. He said that much remained to be done in the Harijan Welfare and field publicity programmes.

The Seminar then broke into groups to consider the subjects. The discussions were continued on April 22, and the Seminar concluded with the plenary session on April 23, 1958. Steps to raise the economic standards of Harijans and detailed programme for ameliorative measures towards their cultural and educational uplift were considered and a minimum programme was chalked out. The co-ordination of publicity activities of the different departments and ways and means of utilising the modern media of mass communication, namely, Films, Radio, Press, Exhibitions, Study circles, etc. were considered and a workable programme was chalked out.

At the end of the Session, the Chief Minister exhorted the Block Development Staff to cultivate personal contacts in rural areas and publicise the programmes and policies of the Government.

Shrimathi Ambujammal, Chairman, State Social Welfare Board, addressed the Seminar during its plenary session and detailed the various methods by which the co-operation of women in implementing the welfare schemes in rural areas could be ensured.

Sri R. Kunjithapatham, Collector of Chingleput, and Sri G. Venkatachalapathy, Joint Development Commissioner, exhorted the Social Education Organisers to evince keen interest in executing the programmes of the Government.

The total production and Sales of Khadi by the Khadi Department through various agencies during April 1958.

PRODUCTION.

	Yards.	RS.	NP.
Khadi	2,37,560·04	5,37,877	94
Silk	1,207·14	15,705	45

SALES.

	Yards.	RS.	NP.
Retail	44,757·06	1,29,913	19
Wholesale	37,058·14	78,556	65

The Role of Co-operatives in the Solution of the Housing Problem

By Sri N. K. APPANDARAJAN, B.A. (Hons.),
Joint Registrar of Co-operative Societies (Housing and Farming), Madras.

Housing ranks in importance next only to food and clothing. A good house to live in, is a primary need of every family. The aim of housing is not only to provide a comfortable shelter for people to live in but also to create such surrounding and services as would keep the inmates fit and cheerful. This is because, housing has a vital bearing on the health of the Nation and the standard of living of the community in general. In spite of its importance in civilised life, it has to be admitted, that housing in our country leaves much to be desired. With the development of towns and urban areas and the continued inflex of population into them from rural parts, housing accommodation especially in big towns and cities has become quite inadequate. The result is that people belonging to the middle and the lower middle classes, as also the poorer sections of the community are obliged to live under conditions, which can by no means be said to be satisfactory. The increase of housing accommodation is, therefore, the primary need of the hour. Besides the construction of houses on whatever sites that may be available in the existing built up areas in towns and cities, the problem of housing includes the opening out of new extensions by the development of new building-sites, in well laid out areas with suitable arrangements for amenities like water-supply, drainage, roads, lighting, means of communication, centres of medical relief, education, shopping, etc.

I shall now tell you what co-operatives have done in tackling the probem of housing. The construction of a new house requires capital and it is not within the means of every-one, especially those belonging to the middle classes and the lower stages of society to raise the funds required for putting up houses. With the generous assistance provided by Government, co-operatives have been able to make a substantial contribution to the solution of the housing problem in our State.

The earliest attempt at organising a co-operative housing society was made in Coimbatore in 1913–14 when the municipality there, opened out extensions. Real progress however, began only a decade later. In 1923, Government recognised the need for tackling the housing problem and decided to provide funds every year to co-operative building societies for the grant of loans to their members for the construction of new houses. The loans were for a period of 20 years and were granted up to 80 per cent of the cost of the construction on a comparatively low rate of interest and many persons belonging to middle classes took advantage of this facility and put up houses of their own in municipal and major panchayat areas, to which the scheme was made applicable.

The problem of housing became more acute after the last war, and special measures became necessary to tackle the problem. Government constituted in 1947, Housing committees in Municipal and major panchayat areas with officials and non-officials as members for the selection of sites in places where there was acute shortage of houses. After these committees selected suitable house-sites, a spurt was given to the activities of co-operative housing societies. New societies were formed in all places where sites were selected and the societies were provided with finances by Government for the construction of houses for their members. The societies formed were of different types. One type of society gave long-term loans to the members for the construction of houses themselves on their own sites. Another type of society not only granted loans to the members but also undertook construction of houses in compact colonies, on behalf of their members. The third type of the society built houses for the members of its own account, and sold them out to the members on the hire-purchase system. There was yet another type of society which not only financed and assisted its members for the construction of houses but also undertook the provision and maintenance of amenities for the colony just like a municipality or a local body. There is only one society of this kind at Katpadi. Many of the above types of societies have been successful in bringing about beautiful and well laid out colonies in their respective places.

There are at present in the State 202 housing societies in the urban areas with 20,052 members and a paid-up share capital of Rs. 120.52 lakhs. Practically all the municipal and major panchayats are served by these societies. They have so far financed the construction of 8,162 houses of which the correction of 7,231 houses has been completed. The remaining houses are under various stages of construction. The total, Government loan outstanding against these societies on date is Rs. 303.87 lakhs.

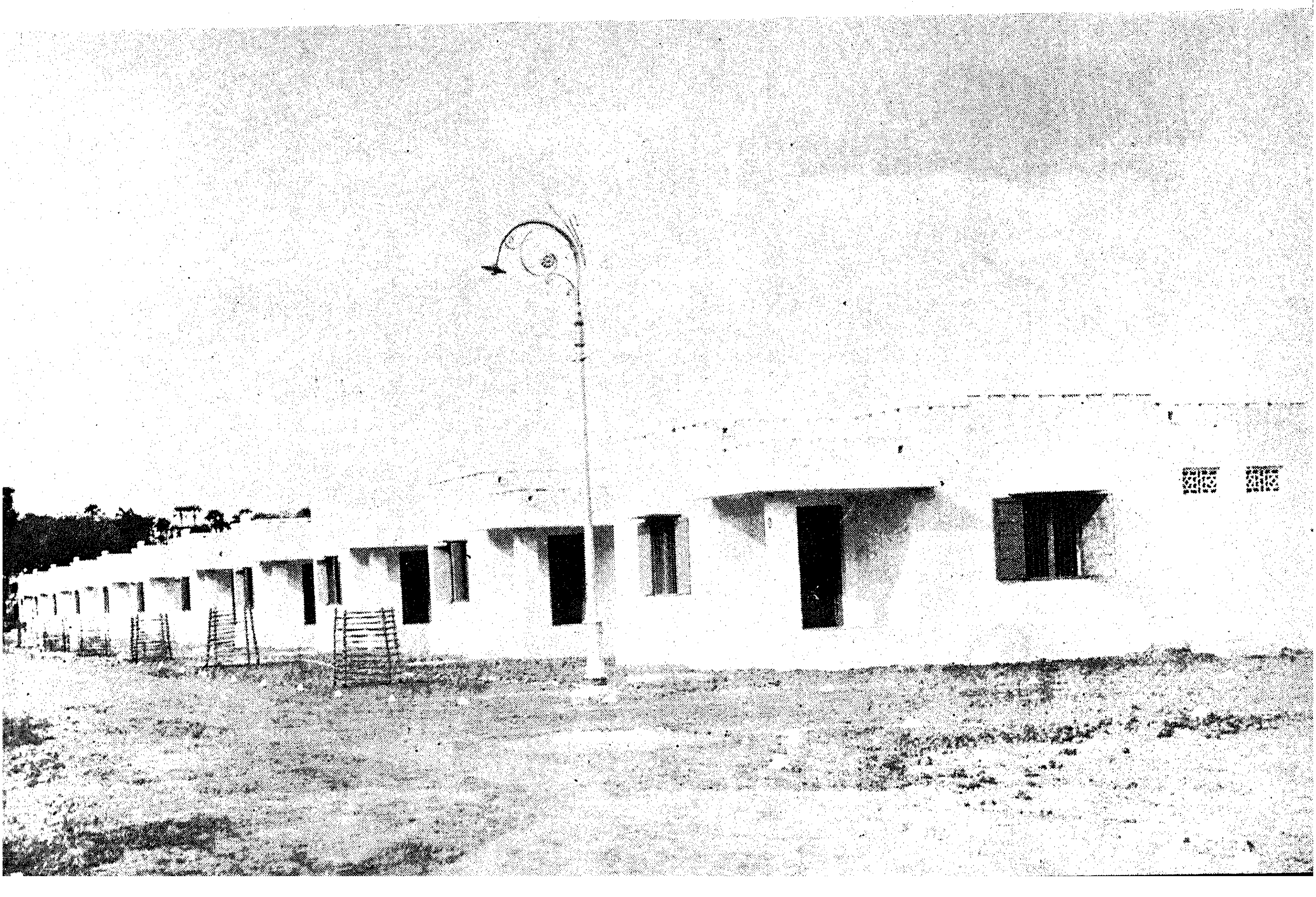
These societies are implementing not only the housing scheme started in 1923, by the State Government but also the Low-Income Group Housing of the Government of India under which long-term loans to the extent of 80 per cent of the cost of construction of the houses including the site subject to a maximum of Rs. 8,000 are given to persons with an annual income of not more than Rs. 6,000 per annum. The Low Income Group Housing Scheme is one of the schemes included in the Second Five-Year Plan and the funds for the scheme

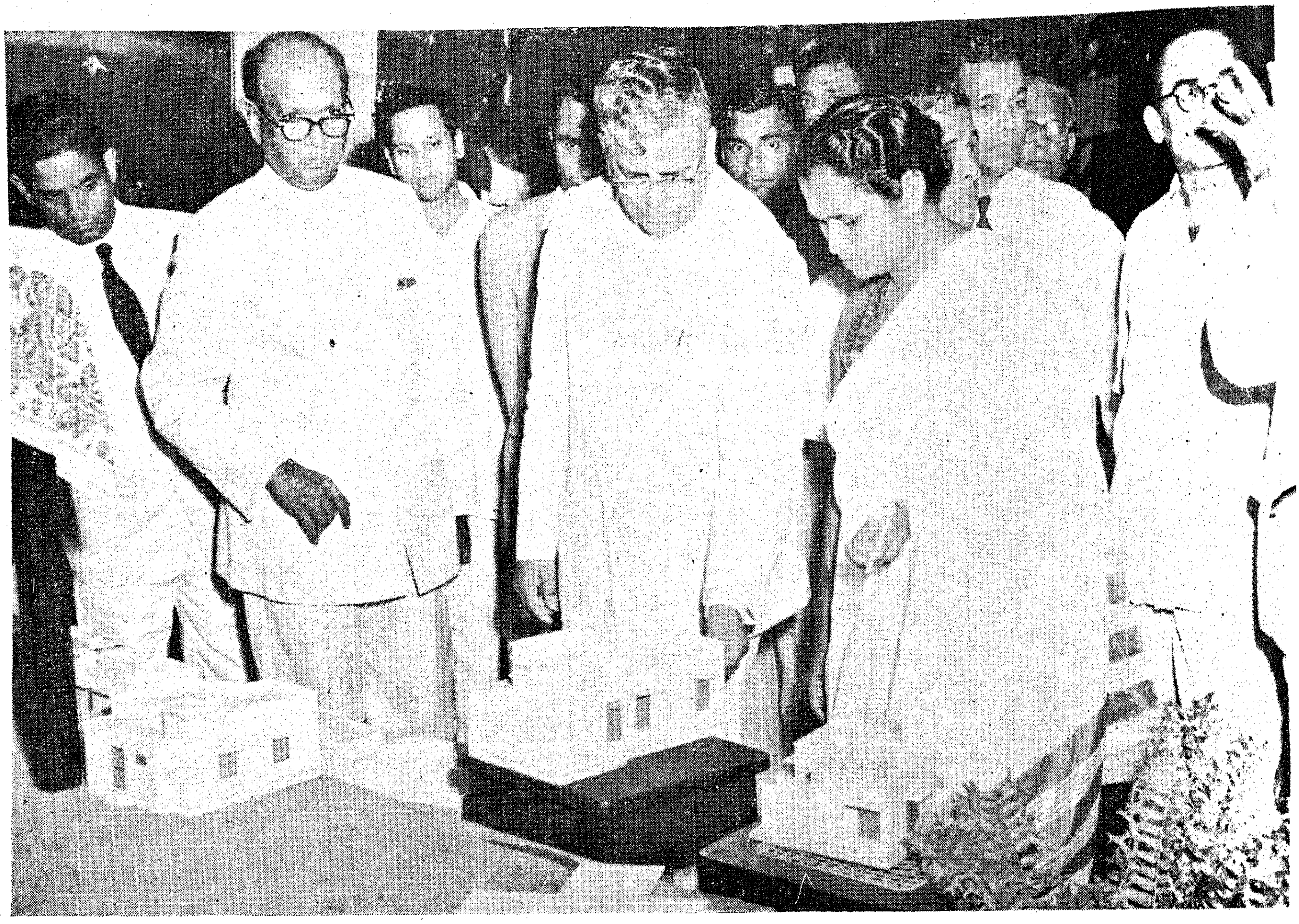
are provided by the Central Government. The target set out is the construction of 1,365 houses under the scheme involving loan assistance to the extent of Rs. 82.31 lakhs, during the Second Plan Period. This is in addition to the target of 1,100 houses set out under the State Housing Scheme with loan assistance to the extent of Rs. 106.54 lakhs. The schemes are being implemented according to schedule. Under both the Schemes, loans at reasonable rates of interest repayable in 20 years are made through housing societies to the extent of 80 per cent of the cost of construction of the house including the cost of site. The remaining 20 per cent of the cost is required to be invested in the society by the members by way of share capital. The full value of the site on which the house is proposed to be constructed is set off against the share capital where the member concerned so desires. Recently, Government have enhanced the maximum loan admissible under the State Housing Scheme from Rs. 10,000 to Rs. 12,000. In the case of Government servants, Government have agreed to provide loans to the extent of 10 times their share capital subject to certain conditions. With these facilities it should be possible for the middle-class and the lower-middle class people to put up new houses for themselves.

Until 1950, the housing co-operatives operated in Urban areas only. The problem of housing in rural parts which is by no means less important required to be tackled and Government approved a scheme for rural housing. The scheme has been modified from time to time to make it more and more attractive; and now Government loans up to Rs. 5,000 are given through rural housing societies for the construction of houses in villages. The loans are given to the extent of 5 times the share capital when the house alone is offered as security and 8 times the paid up share capital when agricultural land equal to the loan amount is offered as additional security. There are 143 rural housing societies on date with 3,555 members and a paid-up share capital of Rs. 2,75,268. They have financed the construction of 211 houses of which 84 are under construction. Though not included as a scheme in the Five Year Plan, the rural housing scheme is being implemented with an annual provision of Rs. 2.5 lakhs, for the grant of loans. There is a need for more and more new houses and on sanitary and modern lines in villages and it is up to the rural population to take advantage of the scheme and bring into being such houses.

The problem of providing houses for industrial workers is also now being tackled by the co-operatives. Under the subsidised Industrial Housing Scheme of the Government of India, Co-operative of workers are eligible for loans up to 50 per cent of the cost of houses including the site and for subsidies up to 25 per cent of the cost, provided they meet the balance of 25 per cent of the cost themselves. Taking advantage of this facility housing societies for industrial workers

Houses in Gandhinagar Area.





Sri R. Venkataraman, Minister for Industries inaugurated the third Batch of Low-income Group Houses on April 30.

have been formed in six places. Two of these societies have been sanctioned loans to the extent of Rs. 2.92 lakhs and subsidies to the extent of Rs. 1.46 lakhs for the construction of 194 tenements for the workers at a total cost of Rs. 8.44 lakhs. The proposal of one more society for the construction of 139 tenements with a loan of Rs. 1.93 lakhs and a subsidy of Rs. 0.97 lakh is under the consideration of the Government of India. The other societies are formulating their proposals.

I have so far told you about what the co-operatives have done in the matter of construction of new houses. The problem of housing cannot be solved by bringing into existence more new houses alone. Many existing houses need major repairs or renewals and some require remodelling also. Unless co-operatives provide the necessary facilities for such repairs, renewals and remodelling also, they cannot be said to have tackled the problem effectively. No doubt, co-operative urban banks are providing loans to house-owners in their areas for such purposes. But for obvious reasons they cannot lend for any long period. The capital needed especially for renewals, extensions or for remodelling will be large and a much longer period than 3 to 5 years for which these banks lend will be needed for the repayment of loans taluk for the purpose. In some towns there are what are called house mortgage banks giving long-term loans for such purposes. There are two such banks in Madras and each at Erode and Coimbatore.

Before I conclude, I wish to tell you how you can get a loan from a co-operative housing society. It is not at all difficult. You have only to approach the President or Secretary of the Urban housing society in your locality, if it is an urban area or of the rural housing society, if it is a village. If there is no society already functioning there, one can be organised and got registered if there are not less than 10 persons willing to form and build houses in the place. You have to join the society by taking at least one share to start with.

If you have a site already or after you are able to secure a suitable one, you may apply to the society for a loan in the prescribed form which you can have from the society. With the help of a qualified Engineer you have to prepare a plan of the house you propose to build and an estimate of the cost of construction. You have to get the plan approved by the Corporation of the Municipality or the Panchayat Board as the case may be.

(The loan for which you are eligible will be determined with reference to the total cost of construction including site value. Please note that it will not exceed 80 per cent of the cost. The

among 20 per cent will have be d by you in the shape of share ital. If it is an urban society, the value will be adjusted towards share capital.

Along with your application for the an in which you should give particulars of your properties income, expenditure, savings, etc., you should also file the documents of title to the site in which you propose to build. If you offer other immovable properties as additional security, title deeds pertaining to these properties should also be filed.

On receipt of your application, the society will obtain an encumbrance certificate for 12 years for your site and other properties, if any, offered as security and obtain the opinion of the Government Pleader about the soundness of your title. If the title is satisfactory and the security for the loan and your repaying capacity are adequate the directors of the society will sanction the loan and apply to the local Deputy Registrar for the sanction of a Government loan. The Deputy Registrar will investigate the application and obtain sanction of the joint Registrar for the loan.

After the loan is sanctioned you have to execute a mortgage deed in favour of the society mortgaging your site and the house to be built on it. The society will then assign the mortgage in favour of Government and it can thereafter draw upon the loan for disbursement to you. The loan will be given in instalments as and when the construction progresses. You will have to commence construction within three months of the sanction of the loan and complete it within a period of 16 months. You should build the house according to the plan and specifications approved by the Joint Registrar at the time of sanction of loan and cannot deviate from them except with his approval. Your building will be valued by the Engineer of the Public Works Department on its completion.

On the completion of the construction of the house or on the expiry of 16 months from the date of first drawal of the loan which ever is earlier, you will have to pay to the society the entire interest accrued on the loan till then. The repayment of principal will commence after the expiry of 12 months from that date. The loan can be repaid either in equal or equated instalments, as may be chosen by you at the time of application. If you repay the loans regularly every month, you come to own the house free of encumbrances after the Government loan is discharged.

By Courtesy—
All India Radio.

In Memoriam

MEENAKSHI

Meenakshi was one of the elephants which worked for the Madras Forest Department. She was very strong, majestic in appearance, highly intelligent and reliable. Her life was one long record of faithful service.

Meenakshi was born in captivity to Chickalakshmi, an elephant of Mudumalai Range belonging to the Forest Department and was a descendant of Doddalakshmi of the Military commissariat of Burma.

Meenakshi never seemed to resent her captivity. She was as happy and as docile as a domestic cow. In her early life, however, in Mudumalai Range she made a bid for freedom twice or thrice and ran away from work. But strangely enough she was always found in the vicinity and was not averse to beiag recaptured. Her service in South Kanara and Malabar was highly commended, though by this time, she had lost vision in the left eye. She worked ungrudgingly for 50 long years.

Meenakshi calved eleven times. Her first off-spring was born when she was 12 years old. Her second calf was born afetr a lapse of about 6 years. The intervals between her subsequent calvings were shorter. Her eleventh and her last calf was born when she was 54 years and 4 months old. She was a good mother and was often called upon to be a foster mother to other calves born in the camp. She was always willing to nurse other calves and did so with loving tenderness. Her attachment to Bessie who like her was born of Chickalakshmi was noteworthy. They took delight in grazing together and often demonstrated their love by playing with each other. Whenever they met after a short separation they expressed their joy at reconcilliation with close embraces and trumpeted greetings.

Meenakshi's health started declining when she was 64. She lost her eyesight completely. An attendant was appointed to attend solely to her needs. He took her out to graze, bathed her and gave her her ration of cat fodder and cooked grain. On 25th May 1957 she was transferred to Moyar camp from Teppakadu. On the way she slipped and fell in the river. Elephran Caesar rescued her. After this her condition deteriorated rapidly and soon she was unable to move. She had muscular spasms and partial lock-jaw. Her gait was stiff and saliva was dribbling from her mouth. It was Tetanus. On 2nd June 1957 when she was well over 68 years of age, she died.

Apart from half a century of hard work to the Department, her calves have brought in handsome revenue to the Government. She was laid to rest in the Mudumalai range where she was born and where she had lived most of her life. Today 'Meenakshi' is dead but her service to the department is unforgettable. Within the Wild Life sanctuary at Mudumalai a small tomb-stone marks the spot where she was finally laid to rest. Engraved on the tomb-stone are the following words:

IN GRATEFUL APPRECIATION
OF WHAT SHE WAS AND
WHAT SHE D D.

"Rest here now noble beast
All thy work well done
Sweeter than all praise
Is that thou deserveth it.'

The Bulletin of Small Industries

To bring into focus the activities in the small-scale sector of industrial development, a monthly "Bulletin of Small Industries" is being brought out by the Development Commissioner, (Small Scale Industries), Shahjehan Road, New Delhi. The bulletin will acquaint its readers with the Government and other agencies functioning in this field and the work they have been trying to do. At the same time, the bulletin also invites small industrialists to share their experiences with their fellow industrialists through its columns.

In the month of May. . .

May 1st.—Sri M. Bakthavatsalam, Home Minister, and Sri Kala Venkata Rao discussed the problems relat-ıg to the Border of Madras and Andhra States.

"e Madras Ministers and Sri Kala Venkata ecided to implement Sri Pataskar's award lification.

May 7th.—The Twelfth meeting of the State Soil Conservation Board was inaugurated to-day by Sri M. Bakthavatsalam.

May 8th.—The Minister for Agriculture inaugurated the Conference of Cinchona Department Officials.

May 9th.—The Madras State Wild Life Board met to-day under the presidentship of Sri M. Bakthavat-salam.

May 10th.—The Governor inaugurated the Horticultural show at Ooty. A rest house was opened to-day at the Mudumalai Game Sanctuary.

May 11th.—State N.G.G.Os. decide to withdraw their strike.

May 15th.—Full-fee concession up to Sixth Form for the children of N.G.Os. in the State was announced to-day.

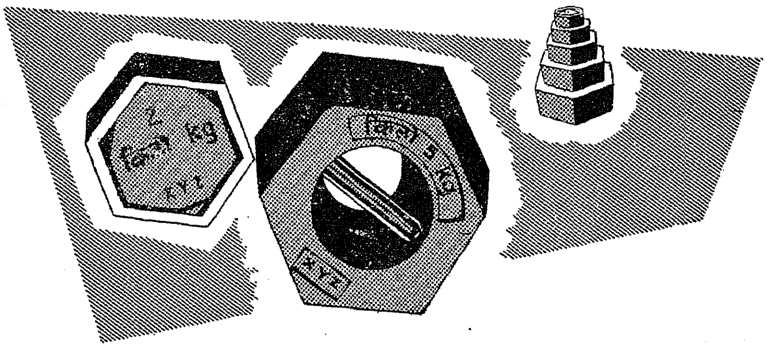
May 17th.—The Governor inaugurated the Scheduled Tribes Conference at Ooty.

May 24th.—The Governor presided over the Fourth Annual Fruit Show at Coonoor.

Pattas were issued to the Tiruvalluvarpuram Co-operative Society, by the Minister for Revenue, on May 1. The photo shows the Collector of Madras, Mr. Thayappa Thevar, handing the pattas to Sri K. Vinayagam, M.L.A.

CHANGING OVER TO

THE METRIC SYSTEM



India has at present no common system of weights and measures. There are not less than 143 systems in use. This multiplicity gives room for malpractices. The introduction of a uniform system throughout the country based on Metric Weights and Measures will be very convenient and make calculations extremely easy, especially because the country has already adopted the decimal coinage. The Standards of Weights and Measures Act, 1956 has laid down the basic units under the metric system. The reform will be gradual so as to cause minimum inconvenience to the people.

Even after its introduction in an area or a trade, the traditional weights and measures will be permitted to be used for a period of three years.

THE CHANGE-OVER TO THE METRIC SYSTEM OF WEIGHTS AND MEASURES BEGINS FROM OCTOBER, 1958

KNOW THE METRIC WEIGHTS

The unit of weight is the KILOGRAM = 1 seer 6 tolas (or 86 tolas.) or 2 lb. 3 ozs.

SUB-UNITS

10 milligrams	= 1 centigram
10 centigrams	= 1 decigram
10 decigrams	= 1 gram
10 grams	= 1 decagram
10 decagrams	= 1 hectogram
10 hectograms	= 1 kilogram

MULTIPLES

100 kilograms	= 1 quintal
10 quintals or 1,000 kilograms	= 1 metric tonne

1

DA-57/240

ISSUED BY THE GOVERNMENT OF INDIA

The Madras State Education Advisory Committee

Early in the beginning of 1956 a stage was reached in the formulation of the Second Five-Year Plan when the allocation of funds for development of education during the Second Five-Year Plan period was settled, and it was found to be far short of expectations. The Secondary Education Commission appointed by the Government of India had made recommendations for the reorganization of the courses of studies in Secondary Schools. A Committee appointed by the Government of Madras assessed the cost of implementing those recommendations and it was found that the cost was far beyond the resources available. Faced with that fact, the Committee was sharply divided in its views about what the Government should do. The Government found themselves unable to accept either of the two opposed views presented to them. Article 45 of the Constitution provides that all children should be compulsorily enrolled in schools up to 14 years of age and given free education; and it requires the State to secure this result not later than the 26th January 1960. On the basis of current rates of expenditure, it is impossible to secure this result even if all the funds available for development as well as the funds at present spent on secondary and higher education were diverted entirely to elementary education. What was the proper course for Government to take, within the limits of available resources (present and prospective), in order to give effect to this Constitutional directive? Two different committees (one set up in 1953 and another in 1955) had taken two different views on this question. Government found themselves unable to agree wholly with either view. It was necessary to resolve differences of opinion on these and other related questions; it was necessary to take decisions on the re-organization of courses of studies in schools as well as on the expansion of educational facilities, so as to make the best use of the funds available for development of education. Government realized the importance of arriving at decisions which would be based on the widest possible measure of general agreement. So they prepared a White Paper on Education and placed it before the Legislature.

The Legislature constituted a Committee consisting of members of both the Houses to assist the Minister for Education in finalising the Education Scheme for the State. The Committee submitted its report in December 1956. The report was discussed by both the Houses of the new Legislature (constituted in 1957) and they gave their general concurrence to the recommendations made by the Committee. These recommendations have been accepted by Government and their implementation has been ordered in G.O. No. 1976, Education, dated 30th November 1957.

As a result of these proceedings, the course of educational policy has been set in relation to the organization and development of elementary education as well as secondary education in the State and it is now necessary first to resettle the organization of school managements in relation to the reorganisation of local administration (now under consideration of another Legislature Committee); secondly to resettle the system of grants-in-aid of elementary and secondary education in relation to foregoing reorganization as well as the recommendations of the Legislature Committee on Education; thirdly to reorganize the machinery of educational administration in the State in relation to the foregoing changes; and fourthly to proceed to the systematic implementation of the recommendations of the Legislature Committee on Education during the Second and Third Plan Periods.

In the course of discussion in the Legislature, two suggestions emerged which are intended to preserve and develop the basis of all-party agreement on which the foregoing settlement of educational policy rests; and to ensure stability and continuity in the implementation of that policy. These suggestions are: *firstly* that the main frame-work of organization of school management and its financial basis should be embodied in an Education Act and *secondly* that a Committee inclusive of representatives of all parties in the Legislature should be set up in order to advise the Government on Education matters generally. These suggestions have been accepted by Government.

Accordingly, the Government hereby constitute a Committee which will be called the "Madras State Education Advisory Committee", consisting of the following members :—

1 Minister for Education — *Chairman.*

Members.

2 Sri V. K. Ramaswami Mudaliar, M.L.A.,
3 C. N. Annadurai, M.L.A.,
4 Sri M. Kalyanasundaram, M.L.A.,
5 Sri S. Pakkiriswami Pillai, M.L.A.,
6 Sri P. S. Chinnadurai, M.L.A.,
7 Sri A. Vedaratnam Pillai, M.L.A.,
8 Dr. (Srimathi) Soundaram Ramachandran, M.L.A.,
9 Sri S. Ramaswami Naidu, M.L.A.,
10 Dr. A. Lakshmanaswami Mudliar, M.L.C.,
11 Sri T. P. Srinivasavaradhan, M.L.C.,
12 Sri V. K. Palaniswami Gounder, M.L.C.,
13 Sri Muhammad Raza Khan, M.L.C., and
14 Srimathi Jothi Venkatachalam, M.L.C.

Functions of the Committee.—The functions of the Committee may be defined as consisting of Review of Progress and Policy Advice over the whole field of educational administration. The Committee should ordinarily meet at approximately half-yearly intervals. The Chairman may, however, call for a meeting of the Committee whenever necessary or at the request of any member of the Committee. Members may suggest any subject for inclusion in the agenda for meeting by giving three weeks' notice of the same. The agenda for the meeting should normally be circulated to members at least a month before the date

(*Continued on page* 31)

Development of Oriental Art and Architecture

By Sri T. PURUSHOTHAM, M.L.C.

A Society for the development of oriental art and architecture was inaugurated by the Hon. Sri M. Bhaktavatsalam, Minister for Home and Endowments, last month at Madras.

The idea of the formation of the Society originated from Shri Sri Prakasa when he was Governor of Madras and it has now taken definite shape. The Society is primarily intended to encourage oriental art and architecture and it is open to all those interested in the twin arts to join it. It is also proposed to start an institute of Oriental Art and Architecture under the auspices of the Society. The inaugural function was highlighted by exhibition of certain models of oriental style, chiefly of the Durga Temple, Jaipur State and the Urban Council Building, Trincomalee (Ceylon), designed by a South Indian Architect.

The model of the Urban Council is that of a modern Administrative Block intended for the use of a public office like one of our first-class municipalities. The entire planning and designing is based on up-to-date engineering. Only the outer elevations and appearances are designed in oriental line, namely, in Dravidian (Tamilian) architecture. The building is of the spread-out type to command maximum air and light. The sanitary blocks are placed at the ends, on either side with two small domes on them so that they can be detached and yet stand attached to the main building. The Council Chamber is purposely placed behind so that it can be a separate feature and a unit by itself. The whole scheme is expected to cost a million rupees. The entire construction is in first-class coursed rubble in cement mortar with all pillars and mouldings in pre-cast R.C.C. type in ashlar finish.

The planning of the Durga temple is on the Brighu Samhitas, the Rupa Mandra and the Silpa Saras. It may be stated in this connection that the sacred architecture is one and the same in general principles whether in the North or the South, though outwardly it may look different and this would show how our ancient architecture unlike the modern, stands to appeal to one and all at all times. The need for its revival is urgent and necessary.

Mr. M. Bhaktavatslam, Minister, welcomed the information of a Society for development of Oriental Art and Achitecture. He said that the temples in our country represented the grandeur of oriental architecture and so it is the State was taking all possible measures for preservation and renovation of ancient temples and hence he was very much encouraged to see that a few enthusiasts have come forward to take keen interest in our temples and their art. He also expressed his gratification that foregin scholars who visited India take interest in temples and temple architecture. He also pleaded for revival of Art and assured State encouragement in all such laudable attempts.

(*Continued from page* 30)

of the meeting. The Committee will transact business as below :—

(i) The Director of Public Instruction will prepare half-yearly Progress Report dealing with the following matters :—

(*a*) Progress of implementation of the recommendations of the Legislature Committee on Education regarding implementation of Article 45 of the Constitution and reorganization of school education. The progress Report should show the distribution of various types of Educational Institutions in the State.

(*b*) Progress of execution of Educational Development Schemes in the Five-Year Plan.

(*ii*) This Report, together with the comments of Education Department thereon, will be placed before the Committee for discussion and reviewed. The results of the review will be recorded in the form of advice to the Education Minister. Action taken on the results of the review will be reported to the Committee.

(iii) Proposals for legislation to be embodied in an Education Act will, after their preliminary departmental formulation, be placed before the Committee for consideration and advice, before a Bill is drafted and presented to the Legislature.

The Health, Education and Local Administration department will provide the secretarial facilities likely to be required by the Committee.

The Committee may co-opt Sri T. M. Narayanaswami Pillai, Vice-Chancellor, Annamalai University, as a member whenever necessary.

The members will be eligible for the travelling allowance and daily allowance at the rates prescribed in the Legislature Travelling Allowance Rules, 1955.

The Committee should be deemed to have been constituted with effect from 10th April 1958.

The expenditure will be debited to "37. Education—p. Direction."

Improvement of Courtallam

The Government have sanctioned a grant of Rs. 40,000 to the Courtallam Township Committee towards half the cost of formation of a new road connecting the Park Road junction and the Main Falls and widening the Main Bridge between Main Falls and the temple in Courtallam. Provision has also been made in the State Budget for the loan of another Rs. 40,000 to the Courtallam Township Committee for the execution of these works.

Essentials of Sweet Potato Culture

By SRI U. NARASINGA RAO,
Horticulturist and Professor of Horticulture, Coimbatore.

Introduction.

The sweet potato is an important subsidiary food crop capable of replacing cereals to a certain extent. It is rich in carbohydrates and has a higher calorific value than rice. The vines are also used for livestock feed.

Climate and Soil.

The sweet potato has a growing period of up to five months. It comes up well in a warm climate but for the best tuber formation, the crop should mature in the cooler months of the year. A crop planted early in October will be available for harvest in February and for higher yields, this season should be preferred. Planting later than October is not recommended in areas where one crop is raised. In places where two crops are raised, the first crop can be planted in May-June and the second crop in October. Deep loamy soils and sandy soils should be preferred for cultivation of this tuber crop. Tuber formation is retarded in heavy soils which should herefore be avoided.

Varieties.

For high yields, large sized tubers and eating quality the following tested varieties are recommended.

V. 2.—A Chinese type, duration $4\frac{1}{2}$ to 5 months. The tuber and its flesh are white coloured. It has given up to 29,845 lb. per acre.

V. 6—Another Chinese type with a duration of $4\frac{1}{2}$ to 5 months. The tuber is red coloured and has a cream coloured flesh. This has given up 27,538 lb. per acre.

V. 8—An American type with a duration of 4 to $4\frac{1}{2}$ months. The tuber is white coloured with a creamy white flesh. This has given yields up to 31,266 lb.

V. 12—Another Chinese type of $3\frac{1}{2}$ to 4 months duration. The tubers are white with a white flesh.

The first two (V. 2. and V. 6) are suitable for cultivation in red loamy soils while the next two (V. 8 and V. 12) are recommended for sandy soils.

Season.

The irrigated crops are planted in September and October throughout the State. For obtaining the highest yields, in the winter season, planting should not be delayed beyond the first week of October. The first monsoon crop in places where two crops are raised is planted in June.

Planting.

Only wines should be used for planting and not tubers. Stem cuttings collected from a harvested crop are planted in a primary, nursery multiplied in a secondary nursery from where they are finally planted in the main field. The primary nursery is planted in March soon after the crop is harvested in a small area near an irrigation source. In June, the vines are cut and planted in a secondary nursery, larger than the primary nursery by about 8 to 10 times. In October, cuttings are taken from the secondary nursery and are planted in the main field.

The sweet potato sets should be planted in furrows for best results. Planting in beds is not recommended. The furrows can be spaced $2\frac{1}{2}$ to 3 feet; apart and the sets can be planted at a spacing of 6 to 9 inches in the furrow. For higher yields the sets should be planted erect and not horizontally as is done with sugarcane sets. Sets of 9 inches in length would suffice for planting. These can be handled easily and would help in economising planting material. Using long sets is not necessary as the stand and yield do not differ much by planting short or long cuttings.

Irrigation.

The sweet potato requires plentiful water-supply for good growth and yield. About 12 soaking irrigations during the lift of the crop are found to be necessary for securing high yields in a normal season. If rains fail totally in any season, the number of irrigations will have to be increased to the extent necessary.

The Chief Minister inaugurated the Water-supply Scheme at B?rmagundam.

After cultivation.

Regular weeding and earthing up are essential. Lifting the vines frequently during their growing season to break and disconnect the new roots formed at the nodes, may help to confine tuber formation to the originally formed roots and to secure larger quantities of good tubers. One of the recent findings is that pruning of the primary, secondary, tertiary branches to keep them at pre-determinded lengths, by pinching off the terminal buds would help in securing larger yields. Pruning to 3 feet length appears to lead to increased yields than leaving the vines to grow unchecked.

Manuring.

Sweet potato is an exhausting crop and requires a plentiful supply of nutrients. A liberal basal dressing of a farm yard manure, compost or green leaves at 10,000 lb. per acre before planting may be necessary. Superphosphate to supply 80 lb. of P 205 per acre can be applied just before planting with advantage. One month after planting, ammonium sulphate and muriate of potash, to supply 50 to 100 lb. of nitrogen and 80 to 160 lb. of potash per acre are supplied. In general, the trend of yield appears to be linked with a combined fertiliser application over a basal dressing of organic manure. The combined fertiliser application may be in the following ratio :—

Nitrogen : 100 ;

Potash : 160 ;

Phosphoric acid : 80 ;

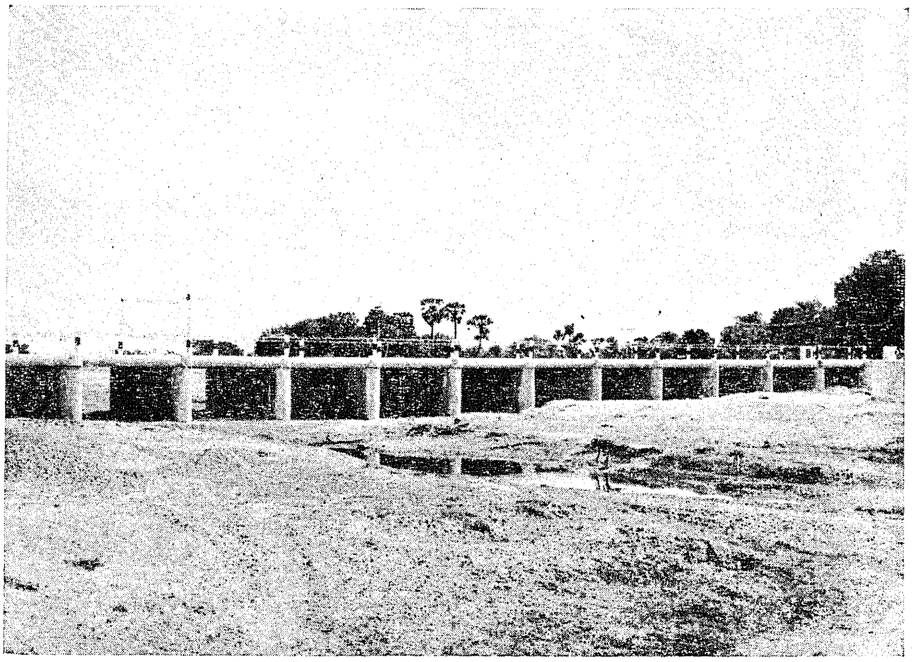
(Pounds per acre.)

The quantity of each fertiliser (Ammonium sulphate, muriate of potash and super phosphate) has to be calculated on the above basis.

Harvest and storage.

The tubers can be lifted with the help of a digging fork. When the tubers are fully developed and mature, the leaves generally turn pale and yellow. The final irrigation before harvest should be carefully adjusted so that the soil is only slightly moist at the time of harvest and does not stick to the tubers.

The harvested tubers, if not disposed of immediately can be stored with advantage between alternate layers of sand or saw dust, up to a period of one month.



The Ulundurpet Bridge which was opened by the Chief Minister.

Pests and Diseases.

One of the serious pests of sweet potato is the weevil which bores into tubers and makes them unfit for sale and consumption. Spraying with Dieldrin (0·1 per cent) has been found to keep down this pest.

Employment situation in Madras State during March 1958

The employment situation in Madras State in general during March 1958 compared with February showed signs of recovery. But improvement has not been uniform in all the districts. Tiruchirappalli, Madurai, Coimbatore, Chingleput, Nilgiris and South Arcot districts have reported livelier employment situation while Salem, Tanjore and Tirunelveli report a slight set-back. The position in Madras and Ramanathapuram remained static.

The overall placement during March edged up to 2,186 compared with 1,836 in the previous month. During the month, 13,761 persons sought registration for employment assistance, 10,675 candidates have been directed against a variety of notified vacancies and the District Employment Officers received intimation of 2,700 vacancies. At the end of March, the total number of registered persons expecting employment assistance was 84,259 as against 84,928 on 28th February 1958.

Shortages of trained civil and mechanical engineering personnel have been reported from almost all the District Employment Offices in the State. Diploma holders in Ceramics are required in the Chingleput district. Vellore, Tanjore, and Nilgiris report shortage of B.T./L.T. applicants. Pharmacists, Nurses and Midwives have opportunities in Vellore, Ramanathapuram and Nilgiris; the supply of Stenographers in Vellore, Salem and South Arcot is inadequate; Tanjore requires tailors, Ramanathapuram trained teachers and Salem Cost-Accountants. Wiremen and Linesman are in surplus in the Kanyakumari district; unskilled office attendants and clerical categories are reported to be surplus to requirements in all the districts.

Arrangements are complete to carry out employment market studies in all the districts and to impart guidance and counselling in the Madras City. The Occupational Information Unit has completed the identification and analysis of 13 families of occupations during the month.

Balance your DIET...

and your BUDGET

In these hard days, a balanced diet and a balanced budget seldom go hand in hand as a matter of course. But, with care, they can. Take your diet, of which fats are a necessary and valuable part. India's cattle cannot provide anywhere near the amount of milk products needed to give every adult and growing child their basic need of two ounces of fat per day. And even if it were possible, good ghee and butter would be beyond the reach of the average person's purse.

Now take your budget. All over the world, diet-conscious people faced with the rising cost of living are cooking with wholesome vegetable fats—margarine, shortening and vanaspati—as a good means of keeping meals nourishing and tasty. Besides being good for our health, these vegetable cooking media are economical—a double advantage to the family budget.

Dalda Vanaspati is made from the purest vegetable oils, to which are added 700 International Units of Vitamin A per ounce, the same Vitamin A content as that of good ghee. In addition, Dalda contains 56 units of Vitamin D per ounce. Hygienically manufactured according to Government specifications, Dalda comes in sealed, double-lidded tins. More and more housewives are turning with confidence to Dalda, and relying on it to put *extra nourishment* into food cooked with it.

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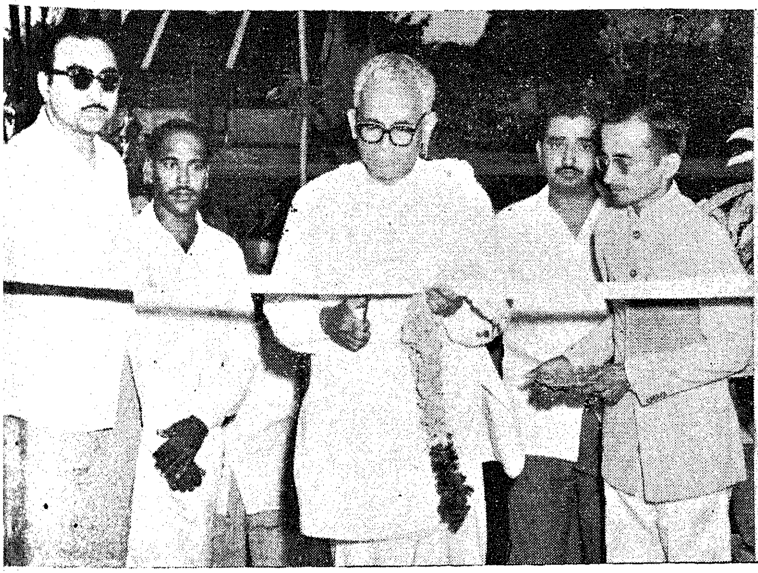
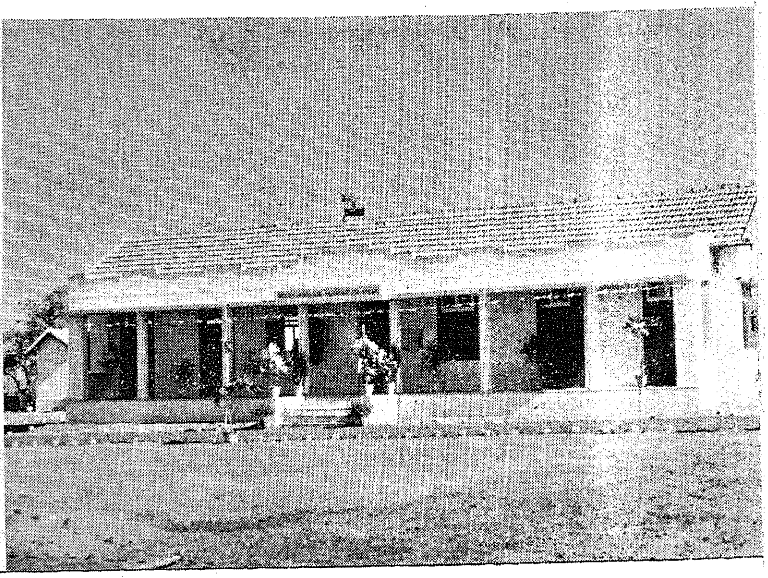
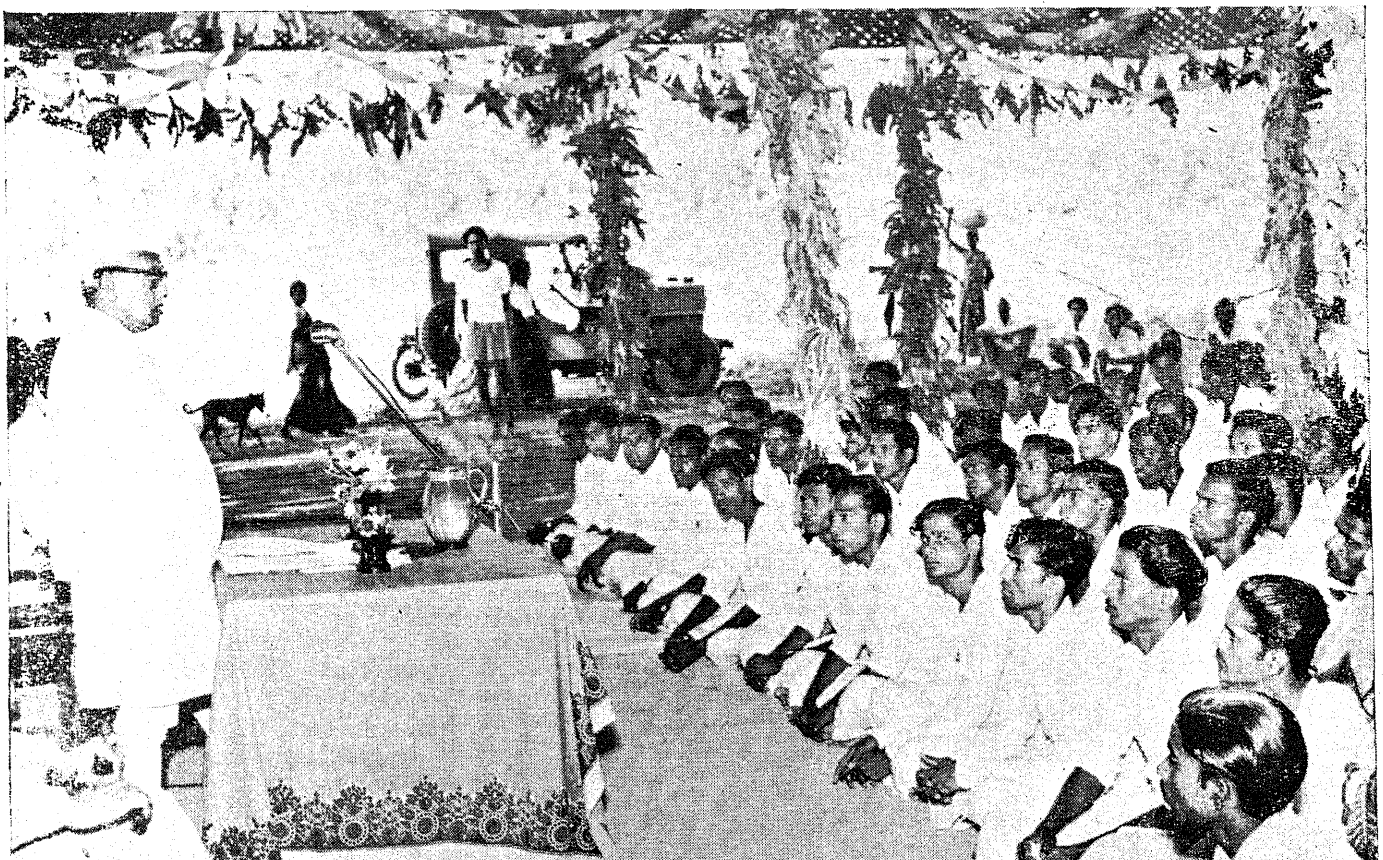




The Sriperumbudur N.E.S. Block Office and Staff Quarters were declared open by the Minister for Home, on May 2.

The Governor, Sri Medhi, addressed a gathering of Grama Sevaks at Krishnagiri, during his visit to the Dam.



Community Development Programme in 1956-57

The Community Development programme was under implementation in 89 blocks in the State during the year 1956–57, spread over 5,342 villages comprising 14,451 sq. miles in area and embracing a population of 10,568,020 according to the Administration Report of the Rural Development Projects Department for the year. People's contribution in the implementation of these programmes came to Rs. 28 lakhs by way of cash and Rs. 27 lakhs by means of labour. Agricultural extension service continued to occupy the foremost place in Community Development programmes. Distribution of fertilisers and improved seeds constituted the most important features of the work. 17·96 lakhs maunds of fertilisers and 106,130 maunds of improved seeds were distributed in these areas. The use and cultivation of green manure has been on the increase in the State, but in so far as the development areas are concerned, this has come to stay. In all, 1·79 lakhs acres were newly brought under green manures during the year. The Japanese method of cultivation had gained currency in all the blocks and during the year 58,167 acres were newly brought under this method, while another 1·37 lakhs of acres were brought under improved methods of cultivation, designed to increase production. Loans to the tune of Rs. 14·14 lakhs was disbursed for agricultural improvements. 11,225 improved implements were also distributed.

Supply of pedigree animals and pedigree birds, inoculation and treatment of cattle and poultry against diseases and castration of scrub bulls were some of the important means adopted for the improvement of livestock in the development areas. The development of fisheries was also intensified during the year with the distribution of 22·22 lakhs fingerlings, to stock 349 tanks.

Electrification continued to receive high priority during the year, completed schemes alone costing Rs. 166·5 lakhs while schemes in progress amounted to Rs. 151 lakhs. 8,320 domestic, 5,939 agricultural, 2,416 street light and 176 industrial connections were given during the year. 428 villages benefited by rural electrification during the year. Under the Community Development programme, 15 miles of national highways, 226 miles of district roads and 117 miles of village roads were under construction during the year. Besides, as part of the local development work programme, 2 hospital buildings, 13 community halls, 38 latrines, 59 bridges and 83 other construction works were in progress. The health visitors attached to the Primary Health Centres and the maternity assistants of the Public Health Department as also of the Women's Welfare Department toured extensively and gave medical advice and assistance to rural families. Systematic construction of soak pits, rural latrines, drains and white-washing of houses contributed a great deal to the eradication of communicable diseases. 1,283 new wells were sunk, while 1,289 old wells were renovated in the year.

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